This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

LANE MEDICAL LIBRARY STANFORD
2 45 0425 1410

3.10

LANE

MEDICAL LIBRARY

SEAL OF THE LELAND STANFORD JUNIOR UNIVERSITY
SEMPER VIRENS
1885

LEVI COOPER LANE FUND

3.10

LANE
MEDICAL LIBRA
SEAL OF THE LELAND STANFORD JUNIOR UNIVERSITY
1885
LEVI COOPER LANE FUN

THE

MODERN TREATMENT

OF

LITIC DISEASES,

BOTH

ARY AND SECONDARY;

COMPRISING

OF CONSTITUTIONAL AND CONFIRMED
SAFE AND SUCCESSFUL METHOD;

WITH NUMEROUS

AND CLINICAL OBSERVATIONS.

BY

N PARKER, F.R.C.S.

SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM,
ETC. ETC.

TH EDITION,

EN, WITH NUMEROUS ADDITIONS.

LIBRARY
MEDICAL LIBRARY
15545
00

LONDON
LL, NEW

MDCCCL

THE

MODERN TREATMENT

OF

SYPHILITIC DISEASES,

BOTH

PRIMARY AND SECONDARY;

COMPRISING

THE TREATMENT OF CONSTITUTIONAL AND CONFIRMED
SYPHILIS BY A SAFE AND SUCCESSFUL METHOD;

WITH NUMEROUS

CASES, FORMULÆ, AND CLINICAL OBSERVATIONS.

LANE LIBRARY

BY

LANGSTON PARKER, F.R.C.S.

LATE SURGEON AND NOW HONORARY SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM,
ETC. ETC.

FOURTH EDITION,
ENTIRELY RE-WRITTEN, WITH NUMEROUS ADDITIONS.

LANE MEDICAL LIBRARY
15545
SAN FRANCISCO

LONDON:
JOHN CHURCHILL, NEW BURLINGTON STREET.

MDCCCLX.

M'GOWAN AND DANKS, GREAT WINDMILL STREET, HAYMARKET.

WJC
P24
1860

PREFACE.

THIS work contains the result of twenty-five years' labour and observation on the pathology and treatment of Syphilis, more especially in its secondary and constitutional forms. During that period, without taking into consideration the extended field of observation which a large hospital constantly presents, I have personally treated more than twelve thousand cases. My experience is recorded in the following pages. In the present edition, I have carefully revised each line; many parts have been entirely re-written, and numerous emendations and additions have been made. The opinions and practice of others have not been neglected; and I believe that this volume presents a correct view of the present state of medical knowledge on the subject of Syphilis up to the period of its publication.

I have no experience in Syphilisation, which, if all were true that is said of it, is too forbidding a practice ever to be employed as a therapeutic agent in this country.

20 Colmore Row, Birmingham,
October, 1860.

CONTENTS.

CHAPTER I.

ON THE SIMPLE OR NON-MERCURIAL TREATMENT OF SYPHILIS.

PAGE

Modern history of syphilis—Doctrines of Hunter, Ricord, Mr Rose, and Mr Carmichael—Objects of the simple or physiological treatment without mercury—Diet in syphilitic diseases—Cura famis, as practised in Sweden and Denmark—Cases illustrative of the effects of diet in syphilis—Modification in treatment necessary in relation to the age, habits, and constitution of the patient—Position of the patient, rest in bed, the warm bath—Local surgical treatment—Non-mercurial treatment not always successful—Opinion of the congress of surgeons at Nantes in reference to it—Ferruginous treatment—The Author's opinion and practice . . . . . . 1—12

CHAPTER II.

ON THE MERCURIAL TREATMENT OF SYPHILITIC DISEASES.

Circumstances which indicate its employ—Particular indications for the use of mercury—When not to be used—The nature of the induration in which it is indicated—In what manner mercury is to be employed—Treatment by internal administration, by friction, by moist fumigation—Change of form advised—When to be discontinued . . . . 13—26

CHAPTER III.

ON INOCULATION, AS APPLIED TO THE DIAGNOSIS AND TREATMENT OF SYPHILITIC DISEASES.

PAGE

Inoculation practised by Hunter—The practice revived by M. Ricord—Experiments of M. Ricord on the inoculation of chancre, of the Author—Inoculation only of value when positive—Phagedenic sores not to be inoculated—Inoculation of buboes—Reason why not often successful—Inoculation with the matter of gonorrhœa—The real position of inoculation in reference to the therapeutics of syphilis—Inoculation of secondary diseases—The Report of the Imperial Academy of Medicine on the contagion of secondary syphilis—Illustrative cases—Opinions of M. Cazenave—Experiments of M. Waller, of Prague, on the inoculation of secondary symptoms 27—41

CHAPTER IV.

OF BALANITIS—INFLAMMATION OF THE GLANS PENIS—EXTERNAL OR FALSE GONORRHŒA—CHANCROUS EXCORIATION, ETC.

Symptoms of balanitis—Causes—Occasionally of pure venereal origin—Sometimes due to natural organisation of the penis in the male, or various morbid conditions of the vagina and os uteri in the female—Illustrative cases of both classes of causes, treatment, complications, relapses . . . . . 42—52

CHAPTER V.

OF GONORRHŒA.

Varieties of—Seats of—Causes of—Experiments of Cullerier on mediate contagion—Diseases which resemble gonorrhœa—A disease distinct from chancre—Pathology of—Symptoms of—Differential diagnosis of—Stages of—First stage of—Abortive treatment of, at this period—Second and third stages of—Antiphlogistic treatment of—Frequently more than an urethritis—Specific remedies in, copaiba, piper cubebæ—Particular forms for their exhibition—Other remedies—Injections—How to be used—Forms for—Gleet—Local symptoms of—Constitutional effects of—Complications of—Microscopical examination of the discharges in—Treatment of, by injections in diseases anterior to the bulb, by injections in diseases of the prostatic and membranous portions of the urethra, by bougies, by blisters, by internal remedies, by surgical operation . . . . 53—82

CHAPTER VI.

OF DISEASES WHICH SUCCEED TO OR COMPLICATE GONORRHŒA IN THE MALE.

PAGE

Alteration in the natural elasticity of the urethra—Stricture—Abscesses in the perineum, and vicinity of the anus—Gonorrhœal rheumatism—Its two forms—Gonorrhœal diseases of the eye—Gonorrhœal ophthalmia—Treatment of—Local remedies—Specific remedies—Mercury—Restoration of the urethral discharge—Gonorrhœal iritis—Gonorrhœal diseases of the testes and their envelopes—Orchitis, how and at what period it occurs—Causes—Differential diagnosis—Illustrative cases—Treatment—Chronic enlargement of the testis—General weakness and irritability of the sexual and urinary organs a consequence of gonorrhœa—General remarks on the treatment of such diseases . . . . 83—101

CHAPTER VII.

OF GONORRHŒA IN THE FEMALE.

Its nature—Seat—Pathology—Use of the speculum—Internal treatment—Local treatment—Treatment of the more chronic forms—Forms for topical applications—Complications—Differential diagnosis—Difficulties in treatment—Gonorrhœal ovaritis . . . . 102—108

CHAPTER VIII.

OF THE SECOND CLASS OF PRIMARY SYPHILITIC DISEASES—CHANCRES, ULCERS, THEIR VARIETIES AND CONSEQUENCES.

Classification of primary venereal sores—Non-indurated chancre—Phlegmonoid chancre—Indurated chancre—Their varied aspect frequently dependent on their seat—Diagnosis of—Is a primary venereal sore always a local disease?—Is a so-called chancre ever the first evidence of a constitutional taint?—Abortive treatment of primary sores, by escharotics—Local treatment—Constitutional treatment—Diet—Mild local treatment recommended—The Author's views on the use of caustics—Those recommended—How to be used—When their use is contra-indicated—Rodet's prophylactic—Phymosis—Primary inflammation—Question of the propriety of mercurial treatment considered—Local treatment of the second stage of chancre—The indurated primary ulcer—Its treatment—Persistent induration of the cicatrix—Relation of buboes to the various forms of chancre . . 109—132

CHAPTER IX.

CHANCRES IN THE URETHRA.

PAGE

History of—Symptoms—Diagnosis—Complications—Prognosis—Consequences—Treatment—Illustrative cases . . . 133—143

CHAPTER X.

OF PHAGEDENA.

General account of phagedena—Causes—Situation—Local treatment by caustics—Other local remedies—The inflammatory forms—The gangrenous forms—Illustrative cases of the successful treatment of, by the mercurial vapour bath . . 144—150

CHAPTER XI.

OF VENEREAL ULCERS IN THE FEMALE.

Situation of—Nature of—Treatment of—Rarely inoculable when seated on the os uteri—Illustrative cases . . . . . 151—154

CHAPTER XII.

OF BUBO.

Three kinds of—Non-virulent—Virulent—Indolent—Inoculation as a test of the nature of—Causes—Abortive treatment—Blisters — Mercury — Antiphlogistic treatment — Terminations—Suppurating bubo—Ulcerated bubo—Sloughing bubo Chronic indolent bubo—Removal of loose portions of integument—Treatment of sinuses—Causes which favour the occurrence of bubo—Premonitory symptoms and their treatment—How a suppurating bubo should be opened . 155—166

PART II.

CONSTITUTIONAL OR SECONDARY SYPHILIS.

CHAPTER XIII.

OF CONSTITUTIONAL OR SECONDARY SYPHILIS.

PAGE
General account—Phases—Prevention—Complications—General treatment . . . . 167—171

CHAPTER XIV.

OF THE CAUSES OF SECONDARY OR CONSTITUTIONAL SYPHILIS.

Primary discharges and ulcers a cause—Inoculation or contagion a cause—Hereditary transmission a cause—The treatment of the primary sore a cause—A peculiarity of constitution a cause . . . . 172—185

CHAPTER XV.

ON THE DIAGNOSIS OF SECONDARY SYPHILIS.

Sometimes difficult and uncertain—Illustrative case, where the nature of the disease in the father was discovered by the health of the children—Illustrative case of a secondary ulcer closely resembling lupus—Rules to guide the practitioner in forming a correct diagnosis . . . . 186—193

CHAPTER XVI.

OF THE PROGNOSIS OF CONSTITUTIONAL SYPHILIS.

Rarely, though sometimes fatal—Its influence in developing other latent diseases—Question of its perfect curability considered . . . . 194—196

CHAPTER XVII.

OF THE STATE OF THE BLOOD IN CONSTITUTIONAL SYPHILIS.

Microscopic appearance of—M. Grassi's researches—M. Waller's experiments on inoculation with syphilitic blood—Condition of the blood-disc 197, 198

CHAPTER XVIII.

OF THE PARTICULAR SYMPTOMS OF CONSTITUTIONAL SYPHILIS—OF SYPHILITIC DISEASES OF THE SKIN.

PAGE
The syphilitic exanthemata—Squamæ—Vesiculæ—Pustulæ—Papulæ—Tubercula—Maculæ—Constitutional or secondary venereal ulcers . . . . 199—217

CHAPTER XIX.

Of syphilitic tumours of the skin and subcutaneous cellular tissue . . . . 218—220

CHAPTER XX.

On syphilitic affections of the appendages of the skin—Alopecia—Loss of the hair from syphilitic causes 221, 222

CHAPTER XXI.

On syphilitic diseases of the nails—Onyxis 223

CHAPTER XXII.

ON SYPHILITIC WARTS, EXCRESCENCES, VEGETATIONS, CONDYLOMATA, ETC.

Their seat—Causes—Primary and secondary forms—Contagious character of the latter—Local and constitutional treatment . 224—231

CHAPTER XXIII.

CONSTITUTIONAL OR SECONDARY SYPHILITIC ULCERATIONS OF MUCOUS MEMBRANES.

Syphilitic affections of the mouth—Of the throat—Of the fauces—Of the pharynx—Of the œsophagus, and of the soft palate—Symptoms—Differential diagnosis—Prognosis—Treatment . . . . 232—238

CHAPTER XXIV.

Syphilitic diseases of the nostrils and nasal fossæ . . . 239, 240

CHAPTER XXV.

On syphilitic diseases of the lacrymal passage 241

PAGE

CHAPTER XXVI.

On syphilitic diseases of the ear 243

CHAPTER XXVII.

ON SYPHILITIC DISEASES OF THE TONGUE.

The iodic tongue—The mercurial tongue—The syphilitic tongue—Rules to guide the practitioner in forming a correct diagnosis . . . . 245—250

CHAPTER XXVIII.

On syphilitic ulceration of the larynx, and on syphilitic diseases of the cartilages of the larynx . . . . 251—259

CHAPTER XXIX.

On secondary syphilitic diseases of the uterus . . . . . 260—270

CHAPTER XXX.

ON THE SYPHILITIC TESTICLE.

Symptoms — Diagnosis — Pathology — Influence on Virility — Treatment . . . . 271—278

CHAPTER XXXI.

On Constitutional Syphilitic Diseases of the Muscles and Tendons 279, 280

CHAPTER XXXII.

SYPHILITIC DISEASES OF THE PERIOSTEUM AND BONES—OSTITIS, PERIOSTITIS, CARIES, NOCTURNAL PAINS, ETC.

Pains in the bones—Illustrative cases of long-continued pain cured by trephining—Nodes—Causes of—Pathology—Termination—Treatment—Differential diagnosis—Prognosis—Treatment—Comparative effects of mercury and iodine—Local treatment—Treatment of syphilitic abscesses seated over bone . . . . 281—292

CHAPTER XXXIII.

ON SYPHILITIC DISEASES OF THE LUNGS—SYPHILITIC CACHEXIA—SYPHILITIC CHLOROSIS.

Nature of the wasting from a syphilitic taint—Not a true tuberculosis—Close resemblance between syphilitic ulceration of the windpipe and laryngeal phthisis—Illustrative cases . 292—295

CHAPTER XXXIV.

ON THE TREATMENT OF SYPHILIS IN INFANTS, PREGNANT WOMEN, AND NURSES.

PAGE

Influence of the father on the health of a diseased fœtus or infant —Illustrative cases—Question considered, Will a man who has had syphilis, but exempt at the time of marriage from all symptoms of disease, beget a diseased infant?—Illustrative cases—Influence of the mother—Modes in which the mother diseases her offspring—Hereditary syphilis—Congenital syphilis—Acquired syphilis—Illustrative cases —Symptoms of infantile syphilis—Primary and constitutional—Period of their occurrence after birth—Treatment of the father, of the mother, of the infant—Treatment of pregnant women, how to be conducted—Treatment indirect and direct of syphilitic children . . . . . . 296—318

CHAPTER XXXV.

ON THE EMPLOYMENT OF PARTICULAR REMEDIES IN THE TREATMENT OF CONSTITUTIONAL SYPHILIS.

The mercurial vapour bath 319
The chloride of mercury 325
The bichloride of mercury 327
The iodide of mercury 328
The biniodide of mercury 329
The bicyanide of mercury 330
The iodide of potassium 331
The iodide of sodium 334
The iodide of iron 335
The iodide of ammonium 336
Sudorifics, vegetable decoctions, and infusions 336
Opium 338

CHAPTER XXXVI.

CLINICAL OBSERVATIONS ON THE TREATMENT OF SECONDARY CONSTITUTIONAL AND CONFIRMED SYPHILIS, BY THE MERCURIAL VAPOUR BATH, AND OTHER REMEDIES.

Cases from No. 55 to 91 . . . . 341—388

GENERAL INDEX . . . . 389—397

INDEX TO THE CASES . . . . 399—403

THE
MODERN TREATMENT
OF
SYPHILITIC DISEASES.

PART I.

PRIMARY SYPHILIS.

CHAPTER I.

THE SIMPLE OR NON-MERCURIAL TREATMENT OF SYPHILIS.

THE modern history of Syphilis, both as regards its pathology and therapeutics, may be said to date from the time of John Hunter, whose treatise on the venereal disease appeared in 1786. The doctrines of that surgeon have influenced surgical opinions and practice even to the present day. Hunter, regarding syphilis and gonorrhœa as varieties of the same disease, and looking upon mercurial inunction as the grand panacea for both, submitted both to the same treatment.[1] This was opposed in his own day by Benjamin Bell, of Edinburgh; but so powerful for good or evil are the doctrines of a great man, that even up to the period of Sir A. Cooper's appointment to Guy's Hospital patients suffering from gonorrhœa were compelled to rub in so many drachms of mercurial ointment till a profuse salivation was induced. Even the late Professor of Surgery in the University of Edinburgh[1] charges a father as being unnatural, who, having a son suffering from syphilis, would submit him to any treatment except a mercurial one.

---

[1] See chapter vi., part 2, of his Treatise on the Venereal Disease.

Hunter proved the existence of a specific "morbid animal poison," or "virus," by inoculation. M. Ricord has revived this practice, and from a most extended series of experiments has laid the foundation of a pathology which has removed from the study of syphilis much of the confusion by which it was formerly surrounded.[2] When the physiological school of medicine and surgery arose in France, its founders and partisans, reviving the idea of Bru ('Méthode Nouvelle de traiter les Maladies Vénériennes,' Paris, 1789,) denied the existence of a special poison, or virus, altogether, attributing the phenomena, or pathological symptoms, called "*syphilitic*," to certain modified conditions of ordinary irritation. Richond des Brus ('De la Non-existence du Virus Vénérien,' Paris, 1826,) and the learned M. Jourdain (Traité Complet des Maladies Vénériennes), may be named as the most strenuous supporters of physiological doctrines so far as they relate to the pathology of syphilis.[3]

An eclectic or mixed doctrine was taught in this country by the late Mr Carmichael, of Dublin, in which it was attempted to show that many primary sexual ulcers were due to the action of a specific virus, and were best combated by specific remedies; whilst, on the other hand, a great number of these ulcers were due to other forms of irritation, and required no specific treatment for their cure.[4]

In 1813, Mr Carmichael first drew the attention of the profession in this country to the treatment of venereal diseases without mercury, limiting the employment of this medicine to certain forms of primary and constitutional infection. Mr Carmichael inculcated the employment of mercury "in alterative doses" in cases of the "simple primary ulcer of the papular venereal disease which did not yield to rest, the antiphlogistic treatment, and astringent washes, and to produce its full effects in the true Hunterian chancre, with hardened edge and base." In the constitutional forms of disease, this surgeon had recourse to mercury in alterative doses, "when the papular and pustular eruptions became scaly, and obviously on the decline, and had not yielded to sarsaparilla, antimonials, and the hydriodate of potass," to produce its full effects in iritis, in nodes when iodine had failed, and for the scaly eruption, the lepra or psoriasis which attends it, and the deep excavated ulcer of the tonsils.

---

[1] Sir C. Bell; see his 'Institutes of Surgery.'

[2] See 'Traité Pratique des Maladies Vénériennes; ou, Recherches critiques et expérimentales sur l'Inoculation appliquée à l'étude de ces maladies, &c.;' Paris, 1838. See also the chapter 'On Inoculation.'

[3] "Never," says Moreau in his address to the Academy of Medicine, "has so much hereditary syphilis been known as since the antiphlogistic method has been so generally employed against the venereal lesions of adults."

[4] 'An Essay on the Venereal Diseases which have been confounded with Syphilis, and the Symptoms which exclusively arise from that Poison, by R. Carmichael;' Dublin, 4to, 1814. It must be recollected in reference to this title, that Mr Carmichael believed in a plurality of venereal poisons.

In 1817, Mr Rose read before the Medico-Chirurgical Society his paper on the 'Treatment of Syphilis, with an account of several cases of that disease in which a cure was effected without the use of mercury.' A careful perusal of Mr Rose's cases will show, as far as the primary diseases were concerned, that although the ulcers had healed, the disease was not cured, for many of the patients left the hospital with a "hard and elevated cicatrix;" the treatment did not prevent constitutional infection, for many of the cases were followed by secondary symptoms; whilst, as far as the treatment of the latter were concerned, they were a long time disappearing, and had a great tendency to recur. Many of the cases were apparently quite cured; the confusion in Mr Rose's paper doubtless arises from the want of discrimination between the two classes of primary sores—the soft and indurated, or the infecting or non-infecting—a point in the pathology of syphilis not recognised in Mr Rose's day.

The simple or rational treatment is directed towards the removal of all the local and constitutional irritation which accompanies a venereal sore, by which the sore itself in many instances heals, and the disease is cured. It is especially indicated in soft chancres; those which secrete pus more or less abundantly, and which are free from a hard base. It consists in placing the patient on a regulated diet, suited to his constitution, not always on a low diet; in confining him to the recumbent position, or to bed; in destroying the ulcer by caustics, or covering it with lint soaked in weak solutions of sulphate of copper, sulphate of zinc, the diacetate of lead, or nitrate of silver; and giving internally aperients, antimonials, the mineral acids, or the preparations of iron, according to the circumstances of the case.

In all venereal affections, whether primary or secondary, a proper diet is of essential service, and a neglect of this element in the treatment frequently nullifies the effect of otherwise the most suitable remedies.[1]

On this point no fixed rules can be laid down; they must be dictated by the circumstances of the case, and call for the exercise of much judgment on the part of the practitioner. It may be easily conceived that the severity of the regimen must vary according to the constitution and habits of the patient we have to treat. Some subjects are soon weakened or rendered irritable by abstinence, or quickly placed in conditions favourable to the action of remedies; others, again, are not so readily brought into such states. It constantly happens that primary ulcers which resist all modes of treatment when the patient pursues his ordinary occupation, and lives in his usual way, heal rapidly when the patient is confined to bed and lives low. I have verified this hundreds of times, both in hospital and private practice. Mr Labatt ('Observations on Venereal Diseases,' Dublin, 1858,) attributes the infrequency of secondary syphilis in regimental hospitals to the severe diet insisted on during the treatment of the primary sore; perfect rest is enforced, and all stimulants are prohibited. Mr Labatt is of opinion that many of the failures under the non-mercurial plan have resulted from a neglect of these restrictions in diet. "When patients were not confined to the hospital, the cases of secondary syphilis were more numerous. This is attributed, not to any error or defect in treatment, but to the unavoidable absence of that discipline and restrictive system as to diet, rest, &c., so essential to permanent success." See pp. 20-22 of the work already quoted. Mr Guthrie also remarked that it was only when the troops were moving and under irregular management, that the cases of secondary syphilis were numerous.—'Med.-Chir. Transactions,' vol. viii., p. 569.

---

[1] In Sweden and Denmark, venereal diseases are treated systematically by diet alone, and to this plan the name "cura famis" has been given. It consists in submitting the patient to a very severe regimen, and the administration of the extracts of bark and conium as medicines. The regimen of the patient during the first six weeks consists of five ounces of roast meat without gravy or condiment of any kind, and six ounces of white bread soaked in water; this quantity is divided into two or three portions, but it is the whole quantity allowed for one day's consumption. The extract of conium is given in doses of four or six grains night and morning. At the end of six weeks the patient resumes his ordinary diet. All kinds of venereal diseases may be treated on this plan, whether recent or inveterate; but it is particularly indicated where mercury has been used without success, or where syphilis exists in a gouty or scrofulous constitution. A decoction of the root of the "smilax china" is given for drink to the extent of two pints in the day. ('Exposé de la Méthode pour guérir les Maladies Vénériennes dégénérées, par Osbeck;' Stockholm, 1811.) The commission appointed to examine into the merits of this plan of treatment decided that the cure was due to the regimen alone, and the medical treatment had little or no effect. The Swedish physicians restrict the "cura famis" to cases of constitutional, inveterate, or protracted syphilis. In primary syphilis it is considered injurious, and is supposed to favour the development of constitutional disease by rendering absorption more active.—For a further account of this mode of treatment, see 'Bibliothèque Médicale,' tomes 60 et 61; 'Journal de Hufeland,' Juin, 1817; 'Quelques Notices sur les Institutions Médicales de Stockholm, et sur le Traitement par la Faim, usité dans les hôpitaux de cette ville;' Gibert, 'Manuel des Maladies Vénériennes,' Paris, 1837.

I introduce two cases to illustrate the opposite effects of diet in the treatment of syphilis.

CASE I.

Secondary venereal ulceration of the throat of many months' standing; failure of the ordinary remedies whilst the patient used her ordinary diet; rapid cure by the same remedies and abstinence.

A healthy-looking female, æt. 26, was sent to me from the country for my opinion respecting her throat, which had been the seat of venereal ulceration for some time past, and for which she had taken mercury under various forms without benefit. During this treatment she had followed her usual occupations and lived in her usual way. There were three deep ulcers on the soft palate, and one on the left tonsil; the remaining portion of the throat being generally of a vividly red colour.

I advised her to leave off animal food, stimulants of all kinds, and take as little food, and that only in the shape of tea or gruel, as she could be comfortable under. She was ordered the third of a grain of tartrate of antimony three times a day, and mercurial frictions to the axillæ. All the ulcers had healed in a fortnight.

I detail a second case, where a totally opposite effect was produced in a protracted case by abstinence and low diet, and this is by no means uncommon.

Case II.

A gentleman, æt. 46, in the habit of living well, contracted a primary sore, which was succeeded by a well-marked attack of syphilitic lepra, which affected the hands, the face, the abdomen, and other parts; for this secondary disease he placed himself under my care, and was treated by the mercurial vapour bath; the scaly eruption had disappeared in about three weeks; two livid blotches, however, remained, one on the face and one behind the ear, which ran on into deep, dirty ulcers, affecting the whole depth of the skin: these not amending, I recommended abstinence from all specific treatment for a time, change of air, and attention to the general health. As the weather was fine, the patient went to the coast, where he consulted a gentleman, who recommended the use of Zittman's decoction, a vapour bath daily, and a very low diet. In six days the sores had spread frightfully; the patient was so reduced that he could not stand, and a copper-coloured mottling broke out over the whole body. A second practitioner was now consulted, who advised a full diet, three or four glasses of port wine daily, and small doses of blue pill with the hydriodate of potass: under this treatment the sores healed, and the patient recovered his health; some small scaly blotches still remained on his return to me, which disappeared under the use of the compound decoction of sarsaparilla, small doses of the bichloride of mercury, and the mercurial vapour bath.

Age, previous habits of living, and constitution, most materially modify the treatment both of primary and constitutional syphilis, especially in relation to diet and general management. A low diet is generally indicated in the earlier stages of primary sores, if the patient be plethoric and accustomed to live freely, or the disease accompanied by much inflammation. It is also indicated in the earlier stages by secondary syphilitic eruptions on the skin, especially if they are accompanied by some amount of fever, or if they are of the exanthematous or scaly kind. In all pustular diseases, or secondary syphilitic ulcerations, or in the protracted or chronic forms of constitutional syphilis, a full diet is almost always essential.

The position in the cure of venereal affections is of much importance; hence, whenever it is practicable, the patient should be confined to bed. This has the advantage of keeping the skin warm, and promoting perspiration, points very essential, whilst the recumbent position favours the return of blood upwards through the pelvis, and tends to mitigate any inflammatory action or tendency. This also renders the application of dressings much easier, and places the patient in a more advantageous condition for the action of remedies. In buboes, posthitis, acute or subacute gonorrhœa (especially if complicated with affections of the bladder or prostate gland), ulcers on the genitals, vegetations about the anus, affections of the skin, &c., the recumbent position in bed, if not indispensable, most materially facilitates the cure.

The warm bath is a modifying agent of great utility. In a great variety of cases the patient may use it daily with advantage. The hip-bath, in some instances, from the situation of the affection, may supersede the necessity of immersing the whole body. The patient may be directed to remain in the bath for longer or shorter periods, according to circumstances. Baths medicated with gelatin, starch, bran, or the decoctions of poppy, henbane, or belladonna, may be employed. Diet, aperients, or the mineral acids, or the preparations of iron or bark, the warm bath, with repose in the recumbent position, constitute the general simple treatment of syphilis; and so efficacious are these means in mitigating the irritations accompanying primitive or secondary syphilitic affections, that, of themselves, they frequently work a cure. Where a mercurial or other specific treatment is adopted, the simple general treatment, pursued at the same time, will be found most materially to assist it, whilst by keeping the constitution in a state free from irritability, it prevents the accidents to which a mercurial course frequently gives rise.

As a good example of the mode in which the simple treatment may be employed, I may refer to the practice adopted by Dr Roe, of the 39th Regiment, as recorded in Dr Graves's 'Clinical Medicine:' "The patients on their admission were purged with Epsom salts and tartar emetic, and were ordered to apply a piece of lint wet with a solution of the sulphate of copper to the sores, and to renew the application every third hour, using a wet linen roller to keep the parts clean, and retain the dressings. Milk diet, aperients every third day, the parts frequently bathed with cold water, particularly if pains existed in the groin. The chancres were occasionally touched with nitrate of silver, or sprinkled with red precipitate, to expedite the cure. No mercury, except as an aperient. Perfect rest in bed."

I shall now indicate some general rules for the surgical treatment of syphilitic affections, considering the particular treatment with each separate form of disease. The best antisyphilitic is frequently a dressing methodically made, it being in vain that we attend to the constitutional treatment of our patient, at the same time irritating or neglecting the local disease.

Syphilitic sores should be daily cleansed, by means of soft new lint and tepid water, from the discharges which their surfaces secrete; this should be done without creating any irritation or pain, and care should be taken not to disturb any parts undergoing a process of cicatrisation. Syphilitic ulcers, perhaps, more than any other kind, are liable from slight causes to become irritable, and assume a phadegenic character. The dressings to these ulcers should be of the simplest kind; mild astringent and anodyne solutions generally succeed better than the various kinds of ointments, particularly those which contain mercury. The testimony of all modern authors is decisive upon this point. Strong aqueous solutions of opium, weak solutions of the nitrate of silver, of the sulphate of copper, sulphate of zinc, sulphate of iron, or the tincture of the sesquichloride of iron, the nitric acid largely diluted, port wine and water, or the black or yellow washes made very weak, are some of the most suitable applications to primary syphilitic sores in their early stages. These generally agree better, are more convenient, and cleaner than ointments; should the latter be preferred, the unguentum zinci, or the cerat. plumbi acetatis, with or without opium, will be found proper. Sometimes cold water, or soft dry charpie, or lint, agrees better than anything else. When a primary sore becomes painful under any local application, when its secretion is increased, when it inflames, or its edges get red and hard, or the ulceration spreads in depth or extent, the local application does not agree, and must be changed.

I do not believe in the general safety of the commonly-employed black wash in the earlier or ulcerating stage of primary venereal ulcers. It agrees better with secondary ulcers than primary ones. I have seen appalling effects from its indiscriminate use. "In the larger number of sores, mercurial applications (washes or lotions) are hardly admissible in our list of remedies; the common astringent salts, lead, silver, zinc, copper, varied as the state of the sore will bear, check the disposition to spread, and bring on an appearance of granulation. To the premature use of mercurial dressings much of the troublesome career of these sores may be attributed."—Key, Report of Primary Syphilitic Cases, 'Guy's Hospital Reports,' vol. iv.

Irritation is frequently kept up by the mere contact of two inflamed surfaces, notwithstanding an appropriate treatment, in all other respects, may be methodically practised; hence, certain forms of superficial primary syphilis, or of balanitis, and posthitis, are kept up by the contact of the glans penis and prepuce, and some gleets protracted from the contact of the two sides of the urethra. Fricke, of Hamburg, first established this fact, which has been verified in the practice of Desruelles and Ricord; the latter has frequently succeeded in curing obstinate gleets by introducing a small portion of lint into the urethra, dry, or soaked in a mild astringent solution. The prepuce and glans, when either is the seat of irritation or ulceration, should always be separated by the introduction of fine linen, or lint. The continued contact of the glans and prepuce, when inflamed or ulcerated, frequently occasions their total or partial adherence. Parts affected with syphilis which are deeply seated, or covered by folds of integuments or mucous membrane, should be daily cleansed by tepid anodyne or astringent injections, according to the character of the accompanying irritation. These injections should be practised quietly, without force, and without creating pain.

Abscesses should be opened early, more particularly if the presence of matter occasions much pain, or take place under fasciæ or tendinous expansions, where the pus cannot readily make its way to the surface.[1] Long and deep sinuses should be laid open, or if it be practicable, a counter-opening may be made.

All parts in a state of natural or acquired strangulation which offer impediments to the cure of syphilitic diseases should be quickly relieved; this becomes necessary in natural or acquired phymosis or paraphymosis. The circumstances which contra-indicate this practice will be mentioned under the article on the particular diseases themselves.

The non-mercurial, simple, or physiological treatment of syphilis, consists in the employment of the means already passed in review, both local and constitutional, without having recourse to mercury as a specific therapeutic agent in their cure, and this plan may be adopted both in the primary and secondary forms of disease. It will be found, however, that the primary are very much more easily cured than the secondary upon such a plan. It cannot be concealed, that the non-mercurial treatment does not always succeed in the cure of primary syphilis; and that, in a great number of cases, the cures are more apparent than real, the sores breaking out again when the patients return to their customary diet and occupations. Matters go on very well whilst a patient is limited to a rigid diet, and confined to bed, and watched in the wards of a hospital; but in private practice this cannot be done; and hence it has been found by military surgeons, that whilst they could cure the privates, they could not cure the officers on the non-mercurial plan. In the French memoirs of military surgery,[1] the medical officers of the military hospital of Toulon state that, although the non-mercurial plan is useful in allaying the irritation, or inflammatory symptoms which accompany primary venereal sores, yet they were compelled to resort to mercury to obtain radical cures. Fifty-two surgeons met at Nantes, in July, 1835, to discuss this question: they had five discussions; two only, one of whom was M. Devergie, declared themselves in favour of the physiological, or non-mercurial treatment of syphilis.[2]

---

[1] An exception to this rule is the formation of matter occasioned by the suppuration of a node, either on the cranium, or on the surface of the tibia or other bones. (See chapter xxix.)

As a general rule or principle, I never employ mercury except as an aperient, in the ordinary forms or earlier stages of primary venereal sores. The immediate local or specific effect of the syphilitic virus produces a degree of irritation or inflammation on the parts to which it is applied, during the continuance of which mercury is, to say the least, injurious, except as an aperient; and it is not till rest, low diet, mild opiate or astringent washes, and the other remedies just noticed, have failed in producing a cure, that mercury is to be thought of as a specific agent. When, however, all these have failed, and the case has assumed a perfectly chronic character, mercury may be used with every prospect of a beneficial result,[3] and this is certainly the result of modern experience on this subject.

In order that the non-mercurial plan may be successful, it should be employed in that species of chancre which is termed simple or soft; the base or skin upon which the chancre is placed exhibiting no indication either of a specific or inflammatory kind. (See chapter viii.) I have not alluded to the treatment by the potassio-tartrate of iron, which consists in applying a solution of this salt to the sore, and taking it internally at the same time. It is indicated in the chronic ulcerative stage of soft chancres, after the acute stage has passed, and the sore continues to spread, or to be approaching a condition of ulcerative phagedena.[1]

---

[1] 'Recueil de Mémoires de Médecine et Chirurgie Militaires,' tom. xxxv.

[2] 'Procès Verbaux des Séances tenues par les Médecins de Nantes, pour discuter la valeur des doctrines nouvelles relativement à la nature et au traitement de la Syphilis;' Nantes, 1835.

[3] Desruelles, of Val-de-Grâce, concluded from observations made on 8810 patients, that the non-mercurial treatment must be considered as the base of all rational practice; "but," says he, "should the ulcers continue without disposition to heal for twenty or thirty days, mercury should be employed to effect a cure."—The same doctrines are taught by Dr. Egan, of Dublin. ('Syphilitic Diseases, their Pathology, Diagnosis, Treatment, &c., &c.;' London, 1853, pp. 330-331.) And this is the result of my own experience, drawn from the personal treatment and examination of more than 25,000 patients, in hospital and private practice, during the last twenty years.

---

[1] ℞—Ferri potassio-tart., ʒvj—℥j;
Aquæ destillatæ, ℥viij. M.
Cap. cochlear. ij. larg. ter die.

A lotion of the same strength to the sore. This, however, requires dilution in many cases.

CHAPTER II.

THE MERCURIAL TREATMENT OF SYPHILITIC DISEASES.

In this chapter I shall point out the circumstances which modern experience has indicated for the use of mercury; for although this remedy cannot be considered in any measure as a specific against syphilis in any of its forms, still there are numerous cases in which it is the most powerful and certain therapeutic agent we can oppose to them.

Why is mercury to be employed in the treatment of syphilis? When is it to be employed? In what manner is it to be employed? What are the states of the constitution and of the sore which are to guide us in pursuing its use or giving it up? And when is it to be discontinued? These are the practical questions which suggest themselves to us in reference to the use of mercury in venereal diseases, and to them I shall give the answers that modern experience has sanctioned.

Modern surgeons employ mercury with a view of healing a syphilitic ulcer that has resisted other modes of treatment, or to diminish the chance of secondary symptoms.[1] When (says

---

[1] This statement requires some comment. That mercury, however administered, will not in all cases prevent secondary symptoms, is a fact as certain, as that secondary symptoms do occur. One reason why mercury is not more successful under this point of view, is owing to the manner in which it is given, and the irregularities of the patient during its exhibition. That mercury should fulfil its intentions, it is necessary that it should be employed properly or not at all, and that its use should be limited to that description of sore hereafter spoken of. The mode of its administration should also be considered, and the patient should be subjected to those rules of diet and regimen which have already been laid down in the chapter 'On Non-mercurial Treatment.' It is owing to a neglect of these precautions that secondary diseases so frequently follow mercurial treatment, which under other circumstances would not happen. The particular modes of its employment will be considered further on.

Cullerier) the local applications before mentioned are insufficient to produce the cicatrisation of a chancre, the patient must be placed upon a general mercurial treatment.[1]

There are several circumstances which particularly indicate the use of mercury in primary syphilis. 1. When a soft chancre which has resisted other modes of treatment remains long open, and shows no disposition to heal under the non-mercurial plan detailed in the last chapter. 2. When secondary symptoms appear before the primary disease is cured.[2] 3. In well-marked indurated chancre, with a chain of indolent, indurated glands in one or both groins, without any tendency to suppuration.[3] 4. In certain cases of rapidly-spreading ulceration, hereafter to be described.

Mercury is not to be used during a state of fever or local inflammation which is present during the first days of venereal ulcers, nor till our patient is prepared for it by appropriate diet and medicines. When the fever and local inflammation or irritation which commonly attend primary venereal sores are removed, when the process of ulceration has stopped, and the sore remains indolent under the use of topical applications; above all, when its edges and base are elevated and hard, mercury may be employed with the full expectation of realising its most beneficial results.

---

[1] 'Recherches Pratiques sur la Thérapeutique de la Syphilis, ouvrage fondé sur les observations recueillées dans le service et sous les yeux de M. Cullerier, par Lucas Championnière;' Paris, 1836.

[2] In Norway, a general specific treatment is never adopted till constitutional symptoms appear.—'Medical Times and Gazette,' Sept. 5, 1857.

[3] The term induration, as limited to a primary sore, is to be understood to mean a cartilaginous hardness of a whitish colour which immediately surrounds the sore, on the top of which the ulcer is sometimes seated, or in which it is dug out; the redness or inflammation accompanying the one is generally on the outside of this white hardness, which is moveable under the skin; this appearance of induration sometimes does not come on at first, but makes its appearance during the progress of a sore, and in other instances the induration appears on the site of the cicatrix after the sore has healed, but under which circumstances it is prone to ulcerate again. Specific induration must not be confounded with the swelling, œdema, or inflammation which accompany other ulcers of the penis, nor again with a thickened condition of the edges of a sore, which is frequently produced by improper local treatment, or appears when simple ulcers become indolent. "In such cases," says M. Ricord, "six months never elapse without secondary symptoms manifesting themselves, unless a specific treatment be employed." It is also the experience of M. Puche, who has verified its truth in hundreds of instances, without an exceptional case. "This is an universal law which there is no means of eluding, but by mercurial treatment." (See Ricord's Letters, by Stapleton, p. 51.)

Mercury always acts more certainly, and with less injury, when the sore is perfectly indolent; when a primary ulcer resists simple treatment, remains indolent, and all irritation has disappeared, it generally heals quickly and soundly under a properly-developed mercurial course. I consider this remark very important. I have constantly observed cases in which a primary ulcer has remained indolent for weeks, uninfluenced by treatment, and rather disposed to spread than heal, the edges getting hard, and the base becoming infiltrated and hard, heal, and all hardness disappear, in a few days after the system had been brought under the influence of mercury.

I have said that mercury is indicated if secondary symptoms appear before the primary sore has healed. It should not be used on the first appearance of eruptions on the skin; it should not be used whilst any febrile excitement is present: it may be, when the eruptions are scaly and on the decline; and it is strongly indicated, if not absolutely essential, in indurated chancre, with indurated glands in the groin, and the scaly eruption or excavated ulcer of the tonsils which commonly accompanies it.

I regard, with MM. Ricord, Cullerier, and others, the indurated chancre, with its chain of enlarged glands, as the first mark or symptom of a constitution already infected; the syphilitic diathesis is already established, though in the first degree, and all modern surgeons conversant with the disease, with very few exceptions, agree on the necessity for the employment of mercury in this particular stage or symptom of the disease. Mercury may retard, weaken, or altogether eradicate the taint in such instances; but much, very much, depends upon the mode of its exhibition.[1]

Mercury does not always prevent secondary symptoms, but it cures them. A chancre specifically indurated marks a system already tainted, therefore administered in such states it cannot prevent what has already taken place; here it removes induration, and promotes a cicatrisation of the primary sore in a manner more certain than any other known therapeutic agent, and it may also prevent the further development or spread of the disease if properly and perseveringly used.

---

[1] See foot-note, page 99, of Ricord's Lectures on Chancre, by Fournier, Maunder's translation.

It should not be employed—and, indeed, it is useless—in ordinary cases of soft chancre, without a phlegmonoid base; it does not control the ulceration in soft chancre. I have watched the disease spread totally uninfluenced by mercury; on the other hand, the ulceration of the specifically-indurated chancre is almost immediately influenced by mercurial treatment. Where the base of soft chancres becomes hard from the effusion of lymph, mercury is useful; it promotes the absorption of this lymph, if other remedies fail in doing so.

In those cases of chronic ulcerative phagedena into which soft chancres occasionally run, and in the ulcerations by the same character consequent on buboes which have suppurated specifically, mercury is also occasionally useful, where the patient has not been injudiciously treated by it in the earlier periods of the disease; here it promotes the healing or cicatrisation of the sore.

Some surgeons have been dissatisfied with the test of induration, as marking the distinction between an infecting and a non-infecting sore; and perhaps there may be cases in which it may be difficult to decide from this alone to which class of sores the chancre may belong. I think, however, that the experienced eye will rarely be deceived in this, especially when taken into consideration with the state of the glands in the groin. The infecting chancre secretes very little; it is dry, red, and glazed, and is a sore very difficult to inoculate. Mr. Henry Lee, in a very able paper on the 'Infecting and Non-infecting Sore,' has made the microscopic appearance of the secretion of the sore a test of its simple or infecting character. He says, "The information which the degree of induration fails to give to the touch, the nature of the secretion, examined by the microscope, will often supply. The globules contained in the secretion of a sore accompanied by adhesive inflammation (the infecting chancre) will often, it is true, at first sight resemble those derived from a suppurating sore. But if the secretion before being examined be treated with acetic acid, a clear distinction may be made between those cases in which the well-known nuclei of pus globules may be seen, and those in which they cannot."—'British and Foreign Medico-Chirurgical Review,' October, 1856.

Mr Lee has also made the microscopic appearance of these sores a test for the exhibition of mercury. Where the secretion showed pus globules, no mercury was given, as it was presumed no secondary symptoms would follow: where no pus globules were detected, the patients were treated with mercury.

It will be seen by referring to my remarks on the exhibition of mercury in the treatment of the simple, or purulent chancre, under what circumstances I recommend or justify the exhibition of this remedy.

In what manner is mercury to be employed, when indicated by the before-mentioned conditions? It may be used in three ways: by internal administration, by friction, or moist fumigation. I have little faith in the internal administration of mercury alone for the fulfilment of the intentions just stated, and never depend on it alone, unless combined with the moist mercurial fume. "You may patch up the disease," says Sir B. Brodie,[1] "by giving the remedy internally, but it will return over and over again." The advantages of administering mercury by the mouth are the facility with which such a plan may be followed, this, however being vastly counterbalanced by its disadvantages, which are, the uncertainty of its result and its operation on the patient; it is more commonly followed or accompanied by the evil effects of mercury, and less frequently followed by the cure of the disease than the other methods. In this country the hydrargyrum c. cretâ, the pil. hyd., or the chloride of mercury, are the remedies generally used; on the Continent, the bichloride, the iodide, and the biniodide.[2]

The treatment by friction is much more certain than that by the internal administration of mercury. This method consists in rubbing in before the fire each night, till the proper effect is produced, from a scruple to a drachm of the stronger mercurial ointment. These frictions may be made on the inside of the thighs, in the popliteal space, on the soles of the feet, or in the axillæ. Frictions in the axillæ are of service in obstinate ulcerations of the throat. I very frequently employ them with complete success in this situation. Cullerier records the histories of two cases cured by mercurial friction in the axillæ, which had resisted its employment in other parts. Sir B. Brodie ('Lectures on Pathology and Surgery,' p. 243,) prefers this method, which was that of the late Mr Pearson of the Lock Hospital, to all others; he believes that surgeons have gone back in their treatment of syphilis. Mr Hunt ('On Syphilitic Eruptions with especial reference to the use of Mercury') is of the same opinion. In reference to the treatment of infantile syphilis,[1] it is clear that frictions are much more safe and efficacious than treatment by the mouth. "Very few of those children ultimately recover to whom mercury has been given internally; but I have not seen a single case in which the other method of treatment has failed."[2] The frictions must be continued every night, or every other night, till the gums swell, and the secretion of saliva is slightly increased; the intervals between the frictions must then be lengthened, but the effect kept up till some time after the sore has healed, and its specific induration gone. We cannot, with Chelius[3] and others, limit the number of frictions to nine, or twelve, or any specific number; they must be continued till the effects above mentioned are produced. That mercurial treatment by friction should succeed, it is absolutely essential that the patient should be confined to a warm room, and if possible to bed; exposure during a mercurial course sometimes entirely destroys the effect of the remedy. It is owing to an observance of these rules that patients in hospital get cured, who are made to observe them, whilst private patients who neglect them, or cannot observe them, are not so fortunate. The diet during this treatment should be light, nutritious, and unstimulating; the older and more weakly the patient, the better the diet; should he be young and plethoric, he should combine the hunger cure with the frictions. The treatment by friction is milder, safer, and more certain than that by the internal administration of mercury; but it is liable occasionally, though not so frequently, to produce the evils already alluded to when speaking of the use of that class of remedies. In certain cases, frictions of different preparations of mercury have been made on the gums and upon the tongue. I have tried them with variable success.

---

[1] 'Lectures on Pathology and Surgery,' p. 242.

[2] See the chapter 'On the Employment of particular Preparations of Mercury,' for details on these points.

---

[1] See the chapter on this subject.

[2] Sir B. Brodie, op. cit., p. 245.

[3] 'A System of Surgery, by J. F. South.'

Professor Sigmund of Vienna esteems the treatment by mercurial frictions as most efficacious. In the 'Wien Wochenschrift' for 1856, No. 36, quoted in the 'Medical Times and Gazette,' May 2, 1857, the Professor gives particular rules for the employment of mercurial frictions; but these rules are almost identical with those I had already laid down in the preceding paragraph. He combines gentle perspiration and a low diet with the frictions. Of all means of eradicating constitutional syphilis, none are more or so efficacious as the combination of sweating by means of moist mercurial vapour, with mercurial frictions: the frequency of the frictions, and the duration and extent of the sweating produced by the bath, must of course be regulated by the peculiarities of each individual case.[1]

Mercury, when indicated in the treatment of venereal diseases, may be employed by way of fumigation, in the manner alluded to by me in the second edition of this work, and more fully detailed in a separate publication in 1850.[2] There is no doubt but that the dry method of fumigation, introduced by Lalouette in 1786,[3] and subsequently practised both in this country and on the Continent, was exceedingly efficacious in the treatment of a great number of venereal diseases intractable or incurable under ordinary methods.[4] The old manner of applying it, however, by vapourising the mercury from a heated piece of iron or hot cinders, was so uncertain that sometimes no effect was produced, at others too much. The plan which I suggested of vapourising the mercury from a tin plate by the heat of a large spirit lamp, and mixing it with a small quantity of common steam, so that the patient is exposed to a gradually increasing temperature, divests fumigation of all its antecedent evils; and I believe, when this method is combined with the internal administration of very small doses of this remedy, or, what is better, with gentle mercurial friction, that this is by far the least hurtful and most certain way of employing mercury that can be adopted.[1]

---

[1] See the chapter 'On the Mercurial Vapour Bath.'

[2] 'On the Treatment of Secondary Syphilis, &c.;' Churchill, 1850.

[3] 'Nouvelle Méthode de traiter les Maladies Vénériennes, &c.; Paris, 1776; publiée par ordre du roi.'

[4] "I have reason to speak in the highest terms of the cinnabar fumigation, which I have never found to fail in arresting the rapid ulceration that

In many forms of primary syphilis, the treatment by the mercurial vapour bath, combined or not with small doses of mercury internally, or with gentle mercurial frictions and proper diet, answers very well; it is rarely attended with any of the accidents which commonly accompany a mercurial course, such as salivation or diarrhœa; it is as certain in its effect and as little hurtful to the patient as any treatment can be.

The treatment by moist fumigations is frequently very efficacious in primary ulcerative phagedena, succeeding to soft

---

we often find so formidable in the throat and on the penis; usually one or two applications are sufficient to change entirely the character of the sores, and to convert the destructive state into a process of healing."—Mr Vincent's 'Surgical Observations,' p. 350.

"So late as the year 1814, it was the practice in Stockholm to heal primary symptoms by most free inunction, and, under this system, it was calculated that the number of cases of secondary affections of the bones was no less than 54 per cent. In 1814 this treatment was changed, and a milder method adopted, *by fumigations* and by diet; and the result is stated to have been so eminently successful, that the College of Health reported that the cases of diseased bones were reduced from the large number mentioned to about 6½ per cent. It is also added, as a consequence, that, instead of there being six hospitals for the reception of venereal patients, there is now only one in all Stockholm."—Williams's 'Elements of Medicine,' vol. ii., p. 134, quoted in 'Brit. and For. Medico-Chirurgical Review,' No. 18, July, 1851.

[1] "Mr Langston Parker's work certainly contains strong evidence in favour of the merits and the advantages of this method over any other mode of obtaining the therapeutic effects of mercury in this disease."—'Edinburgh Medical and Surgical Journal,' No. 193, October, 1852.

chancre or to the ulcerating syphilitic bubo. I succeeded in curing a patient, in the year 1858, in whom the upper portions of the thigh and lower part of the abdomen were covered with large sores, consequent on the spreading of an ulcerated syphilitic bubo which had succeeded to a soft chancre. This case had resisted various modes of treatment for twelve months previously to being placed under my care. The cure was perfect, and all the ulcers had healed after six weeks' treatment by the vapour.

Salivation rarely accompanies treatment by moist fumigation, and this is prevented by the profuse sweating which the process occasions. If patients use an ordinary vapour bath whilst taking mercury internally, or employing it by friction, salivation very rarely takes place.

During the employment of mercury, the states of the sore, of the constitution, of the mouth and breath, are to be carefully watched, since each of them may assume certain conditions which would render the further use of mercury injurious.

The state of the sore whilst the patient is taking mercury should be frequently examined, and topical applications suited to its condition employed. At one time it may require anodynes, at another astringents, or again slightly stimulating applications may become necessary. During the mercurial course, also, the diet should be mild and unstimulating, and the condition of the stomach and bowels carefully attended to. Dr Wallace recommends the mastication and deglutition of grains of allspice or pepper during the day, and covering the abdomen with two or three folds of flannel. A nightly draught or pill of some preparation of opium with capsicum[1] may be employed with advantage, even during the period the patient is using mercurial frictions; the former not only prevent those attacks of pain, griping, and diarrhœa, which sometimes come on during a mercurial course, and materially retard the healing process, but they contribute directly to the therapeutic effects of the mercury.

---

[1] ℞ Pulv. opii, gr. j;
Pulv. capsici, gr. ij;
Conf. aromat. q. s. ft. Pil.
Omni nocte sumend.

Or,

℞ Liq. opii sedativ., ♏ xx ad xxx;
Tinct. capsici, ♏ xxx ad L;
Aquæ cinnamomi, ℥j. M. ft. Haust. h. s.s.

It is from a want of attention to these circumstances that persons are so frequently placed upon the mercurial plan without being cured. This arises from their neglecting the modifications of topical applications, and not observing the dietetic regimen suited to their state.

The condition of the sore is very frequently an indication of the effect of mercury upon the constitution, and points out clearly whether it is agreeing with the system or not. From this circumstance, I recommend a frequent examination of the local disease during the time the patient is using mercury. "It will be found a most important rule in practice to omit all mercurial treatment whenever there appears an increase of inflammation or sensibility to arise in the local disease during the employment of mercury; for a perseverance in its use, under such circumstances, will almost inevitably tend to some form of destructive action, determined in its character by the constitution of the patient. In such cases we must have recourse to emollient and anodyne applications, purgatives, rest, abstinence, and diaphoretics, with or without narcotics; and, as soon as the morbid actions which have supervened have been removed, mercury if necessary may be again resumed, to be suspended afresh in case of a return either of inflammation or irritability."[1]

The state of the constitution as well as of the sore demands great watchfulness during the administration of mercury for the cure of primary venereal sores. It is quite certain that venereal sores which have resisted all other modes of treatment daily heal under the use of mercury, whilst the remedy produces no sensible effect upon the economy either by causing salivation or mercurial fever, more especially when moist fumigation is used. We therefore insist upon the principle, that the greater the degree of excitement or of deviation from the healthy condition of any of the functions of the body which mercury produces, the greater is the danger of its action being followed by deleterious effects, or of its ceasing to influence in a salutary manner the symptoms of syphilis.

---

[1] Wallace, op. cit., p. 119.

It is not necessary that mercury should produce salivation in order that its benefits, in curing primary syphilitic ulcers or diminishing the chance of secondary symptoms, may be realised.[1] What, then, are the rules to guide us in these circumstances? How long is our patient to be submitted to the use of mercury, and when is it to be discontinued? Is the healing of the sore without a thickened condition of the cicatrix our rule for the discontinuance of mercury? I think not absolutely; the disappearance of a symptom is not the cure of a disease; and, as M. Ricord has very justly observed, "that to continue specific treatment only until the symptoms disappear is the method by which we may be almost sure of their return." A change in the form of mercurial remedy exhibited is frequently very efficacious, particularly in syphilitic diseases of the skin, or in rebellious forms of ulceration. I have seen the mercurial fume bath succeed after a complete treatment by inunction and blue pill had failed, and the bichloride in small doses beneficial when blue pill and calomel had been taken without success.[2] "A gentleman was treated by me for a scaly eruption, which yielded in three weeks to the moist fumigation. At this period some large red blotches appeared on the face and abdomen, which ran into foul sores. The vapour had no effect on them;

---

[1] The gums should be just touched with the remedy; they should be made red, elevated, and slightly sore, and the breath fetid; beyond this it is not necessary to go: the remedy must then be diminished in quantity, or the chlorate of potass given. Salivation, properly so called, and ulceration of the mouth should be carefully guarded against.

[2] "Although mercury acts specifically and independently of the forms under which it may be administered, still the choice of these is a matter of importance. An individual who may prove refractory to one of these may be strongly acted upon by another, and will only derive benefit from the one which is most appropriate to his constitution. One preparation may have no effect upon a patient, whilst another gives rise to exaggerated pathogenic effects."—Ricord's Lectures on Chancre, by Fournier, Maunder's translation, note, p. 149. What is more remarkable, and what I have frequently observed in the administration of mercury, one preparation will influence a symptom beneficially for a time and then lose its effect, whilst the cure shall be completed by altering the form of the remedy.

but they yielded quickly to small doses of blue pill and the iodide of potass. These had hardly healed, when a second scaly eruption made its appearance, different in character to the first, which spread under the use of blue pill and iodide of potass, but which very quickly disappeared when the vapour with one-twentieth of a grain dose of the bichloride was used. No return of symptoms since." The old rule was to continue the remedy, after the disappearance of the symptoms, for as long a period as it had taken to cause the disappearance of them; this, though not infallible, is certainly not a bad guide in practice. Salivation certainly is not a test of the eradication of disease, and, if it occur suddenly or prematurely, rather gives promise than the reverse of a secondary attack.[1] In fact, there is no certain rule that can be laid down on this point. The late Dr Colles inculcated that mercury should be continued for a few days after all hardness of the cicatrix had been removed, and thinks moderate ptyalism should be kept up for a month. Mr Judd mentions twenty-five to thirty days; M. Ricord advises a "daily dose to produce a sensible or physiological effect for six months." The rule I invariably act upon is to continue the specific remedy for two or three weeks after the primary disease has disappeared, with all induration of the cicatrix; to advise the patient, when he leaves me, to live regularly, take a smart aperient from time to time, a vapour bath once or twice a week; and to avoid all causes which are likely to interfere with the general health, since it has been shown by Cazenave[1] and others that accidental causes affecting the general health very frequently determine an outbreak of syphilis, and hence in confirmed cases regular attacks occasionally supervene in spring and autumn.

---

[1] So little do modern surgeons consider salivation, properly so called, necessary to the cure of syphilis, that they do all they can to prevent it. Salivation is one of the accidents of mercurial treatment, and retards its beneficial effects. Hence various methods have been suggested to prevent the occurrence of salivation. Sweating prevents it; and this is one of the great advantages of the vapour treatment. One of the most efficacious remedies now used is the chlorate of potass. If much soreness of the gums be produced by a mercurial course, this is quickly arrested by the exhibition of the chlorate of potass; if administered before this occurs, it prevents it. From half a drachm to two drachms a day must be taken. It is better to wait for the action of the mercury on the gums before the chlorate of potass is given. "It possesses a preservative or prophylactic action, which permits of the administration of mercury for long periods without the least injury to the cavity of the mouth; the proof of such immunity being due to the chlorate of potass is found in the fact that mercurial stomatitis is at once developed when the chlorate of potass is left off." Given during a mercurial course, it protects the mouth from salivation, and does not prevent or interfere with the therapeutic action of the mercury. It may be used as a gargle, as well as given by the mouth. See M. J. V. Laborde's Memoir which gained the Corvisart prize for 1857, 'Edin. Journal,' Aug. 1859, from 'Gazette Médicale,' May, 1859; also the note by Fournier to Ricord's 'Lectures on Chancre,' p. 336, French edition. The biborate of soda and the chlorate of soda have the same effects in a minor degree.

The state of the mouth should be carefully examined before resorting to a course of mercury; sometimes a stomatitis may be present before the administration of this remedy, and we might thus be deceived in its effect, mistaking the inflammation of the mouth, which was previously in existence, for one which is the result of mercury. It is quite certain that many morbid conditions of the mouth and breath so closely resemble those produced by mercury, that without an examination of the mouth before resorting to a mercurial course, we might be led into great error. When the breath becomes fetid, and the gums tender, the mercury must be diminished in quantity, and the chlorate of potass given. Patients may also use slight astringent gargles, with the mineral acids.[2]

M. Desruelles, surgeon to the military hospital of Val-de-Grâce, having the charge of the venereal department of that establishment, and a partisan of the simple or physiological treatment of syphilis without mercury, entertains the following opinions as to its use:—

---

[1] 'Traité des Syphilides; Causes des Syphilides,' p. 529.—See also a remarkable case, and the remarks on it by Sir B. Brodie ('Lectures on Pathology and Surgery,' p. 247), which fully bear out what I have said on this subject.

[2] ℞ Sodæ chlorid. solutionis (Beaufoy's);
Tinct. myrrhæ, āā ʒss.;
Aquæ, ℥v. M. ft. garg.

℞ Aquæ destillatæ, ℥vij;
Aluminis et potassæ sulph., ℈ij;
Mellis rosarum, ℥j. M. ft. garg.

Certain chancres with a hard base, which leave behind them in healing an indurated cicatrix, are more frequently followed by secondary symptoms when treated without mercury, than if this remedy had been given.

When venereal sores become stationary, or do not heal under the simple treatment, and the exhibition of mercury is not contra-indicated by the inflammatory or irritable condition of the sore, or certain states of the constitution, mercury may be advantageously used. Mercury is not to be employed when any of the viscera present symptoms of irritation, when the patient applies immediately after having contracted his disease, or when the sore heals quickly under the simple treatment.

Mercury may be given when the local inflammation accompanying a venereal sore has been subdued, and the patient is prepared for its exhibition by diet and aperients, the sore remaining indolent, of a bad aspect, and not healing or appearing to be influenced by the simple treatment. This remedy may be also employed if the sores are complicated with inflammation or enlargement of the glands of the groin, or if any affection of the skin, as papular or other eruptions, make their appearance during the simple treatment, and there is reason to believe the constitution affected.

CHAPTER III.

ON INOCULATION, AS APPLIED TO THE DIAGNOSIS AND TREATMENT OF SYPHILITIC DISEASES.

HUNTER practised inoculation, but not on an extensive scale. His experiments led him into numerous errors; they led him to conclude that a chancre and a gonorrhœa were the same disease, and that secondary symptoms, because they were not inoculable with a lancet puncture, were not contagious; opinions at variance with modern observation and the result of more extended experiments. M. Ricord has deduced from an extended series of experiments certain conclusions of great value and importance, which he has given to the world in his great work, 'Traité Pratique des Maladies Vénériennes; ou, Recherches critiques et expérimentales sur l'Inoculation, appliquée à l'étude de ces maladies.'[1]

A chancre is produced by a specific matter which is secreted by a chancre only, which matter produces a similar disease whenever placed in circumstances favourable to contagion. This is found in the pus which simple or non-indurated chancres secrete, and also in indurated chancres which furnish or have been made to furnish a purulent secretion.

This specific matter is only secreted from the surface of a chancre during its first stage, that is, during the period of ulceration, or when the sore is indolent or stationary. At these periods only does a chancre secrete a virus capable of producing a similar disease by inoculation. When the sore begins to heal and a process of reparation has commenced, it is merely a simple ulcer, does not furnish a specific secretion, and is not capable of propagation by inoculation.[2]

---

[1] Paris, 1838.

[2] It would appear that these views were likewise entertained by Dr Wallace, who divides a chancre into two distinct stages or phases—the first

If matter be taken from a chancre during the period of ulceration, and introduced under the epidermis by means of a lancet, it produces the following effects. During the first twenty-four hours the puncture becomes more or less inflamed; from the second to the third day it is accompanied with slight tumefaction, and presents the appearance of a small papula surrounded with a red areola; from the third to the fourth day the disease assumes a vesicular form, the epidermis being raised by a fluid more or less opaque, presenting at its apex a small dark point; from the fourth to the fifth day the contents of the vesicle become purulent, the apex of the pustule depressed, resembling very much the pustule of smallpox. At this period the areola, which had progressively increased, begins to diminish or altogether disappears, particularly if the disease does not increase: after the fifth day, however, the subjacent and surrounding tissues, which hitherto had undergone little or no modification, or were merely slightly œdematous, become indurated by the extravasation of a plastic lymph, which communicates to the touch the resistance and elasticity of cartilage. After the sixth day the contents of the pustule thicken, the pustule itself shrivels up, and is covered with crusts. These enlarge towards their base, and forming by successive strata, at length assume the form of a truncated cone with a depressed apex. If these crusts are detached, or if they fall off, we find under them an ulcer with the hard base of which we have spoken, extending through the whole thickness of the skin. The surface of this ulcer, of a deep red colour, is foul, covered with a thick adhesive pultaceous matter, almost like a false membrane, which cannot be removed by any attempt to clean the sore. The edges of the ulceration at this period as though it had been dug out from surrounding parts by a sharp circular instrument. The immediate vicinity of the sore is surrounded by a red, dark, or livid margin, more elevated than the surrounding parts.

Such is the course which the inoculation of the syphilitic

---

one of ulceration, the second one of reparation; he particularly insists upon the impropriety and danger of administering mercury during the first stage, that of ulceration.

virus generally runs, when the inoculation is successful, and when the matter is taken from a simple or non-indurated chancre secreting pus freely. The indurated or infecting chancre is very difficult to inoculate; it is the simple chancre, with a profuse purulent secretion and a soft base, which produces a characteristic pustule when inoculated. M. Fournier, in the notes to M. Ricord's Lectures on Chancre previously alluded to, gives a detailed account of forty-four cases of simple chancre which were inoculated; forty-four positive results followed. He adds fifty-five inoculations of indurated chancres which yielded no results. The indurated chancre cannot be commonly inoculated with the lancet puncture; but the following experiment made by Dr Faye shows that, under these circumstances, it is readily propagated by inoculation: "The patient had a true indurated chancre, from which the pus was tried with sixty inoculations by lancet puncture, on eight different persons, without the slightest effect. A small incision was then made in the patient's arm, and some threads moistened in the pus of his own chancre inserted into it daily. By these means venereal ulcers were obtained which yielded pus of great intensity, and which was readily inoculable. This experiment showed the fallacy as to the matter from an indurated chancre being regarded as non-inoculable."—'Edinburgh Monthly Journal,' October, 1857, p. 364. Probably the mode of inoculation is in fault when indurated chancres fail to be inoculated. Such was the fact clearly in Dr Faye's case; although the lancet puncture failed, yet another mode of inoculation succeeded. The same takes place with respect to secondary symptoms, which although not inoculable by a lancet puncture, are commonly so in other modes which I shall presently allude to. That inoculation should succeed, it should be carefully performed. I always raise the epidermis with a new or carefully-cleansed lancet, and introduce the virus on the tip of a new vaccine point; this should be done two or three times, if the first puncture does not succeed. Primary venereal sores of a phagedenic character should never be inoculated. (See, in addition, 'On different Forms of Primary Syphilitic Inoculation,' by Mr Henry Lee, 'Medico-Chir. Transactions,' vol. xlii.)

The ulcerations completely destroyed or arrested on the third, fourth, or fifth day from the application of poison, are not liable to secondary inflammation. It is not before the fifth day that the induration of chancres commonly commences, and it is the indurated chancre that is most frequently followed by secondary symptoms; this induration seems to indicate that the affection has become already constitutional; as long as there is no induration, we may suppose the disease to be merely local.

The various characters of chancres are due to circumstances which are foreign to the specific cause which produced them; these are principally the particular constitution of the patient, his mode of living, the influence of any antecedent or present disease with which he may happen to be affected, the local treatment of the sore, and the organisation of the part on which the chancre is seated. It is from one or many of these circumstances that we see phagedenic ulcers in subjects who have contracted their disease from others affected with ulcers of the simplest character.

The first stage of chancre, *i. e.* of ulceration or indolence, is the only one during which the disease is susceptible of propagation by inoculation; the period of this stage is not limited, but may extend over a long period of time, frequently many months.

The researches of M. Ricord on the nature and differential diagnosis of buboes are of equal interest with those which we have detailed on the subject of primary sores. Buboes are of two kinds, simply inflammatory or virulent: in the first instance, succeeding to gonorrhœa, balanitis or any other primitive affection; and in the second, arising from the consequences of the direct absorption of specific matter from a chancre. To the pathology of bubo we shall return in the chapter particularly devoted to its consideration, in this place merely detailing the results obtained by inoculation from buboes in a condition of ulceration.

A virulent bubo, or one resulting from the absorption of the specific pus from a chancre, is a disease precisely similar to chancre, merely differing from it in its seat, and the anatomical organisation of the parts affected. This species of bubo is the only one capable of producing a pustule by inoculation; that the symptoms hitherto indicated by authors, with a view of establishing the differential diagnosis between a true virulent bubo and one merely inflammatory, are of little value, inoculation being the only certain and pathognomonic sign.

It must be evident, and indeed the fact has been admitted by all observers, that very few buboes can be inoculated in proportion to the number of the primary venereal sores that are followed by such a result. The late Dr Wallace, of Dublin, is said to have succeeded only three times in many hundred experiments. Dr Egan, also, frequently failed in producing the characteristic pustule; the same has happened to myself, and must have done to all other surgeons who have tested buboes in this way. Whether we test the pus that first escapes when a bubo is opened, or that from the bottom of the abscess, "the deeper layer," the result is in many instances negative, and yet the bubo may be of a purely syphilitic character. This may be very easily explained by the fact, that the virus absorbed from the chancre by the lymphatics is modified in its passage through them, and the first lymphatic gland or glands they enter, by becoming mixed with the ordinary products and contents of the gland itself. The virus acts as an irritant on the lining membrane of the lymphatics, which causes them to swell and inflame whilst the morbid poison is passing through them. "On examining glands which become enlarged from the result of irritation from a neighbouring ulcer, we find them to be soft, and readily yield, on section, a dirty, turbid fluid. If we examine this fluid under a magnifying power of 250 diameters, we find it to be crowded with the cell elements of the gland, some of which are considerably enlarged. It would appear that, under these circumstances, the cell elements not only increase in number, but that some of the latter assume a power of development which they never present in a state of health."[1] If this condition go on to suppuration, the specific irritant must be so mixed up with pus and the altered secretions of the gland, as to be with difficulty met with sufficiently pure to produce a characteristic syphilitic pustule when tested by inoculation; and this is the true explanation why syphilitic buboes are not so frequently inoculable as primary sores; here, as in primary sores, inoculation is only of value when positive.

---

[1] 'Leucocythemia, or White-cell-blood, in relation to the Physiology and Pathology of the Lymphatic Glandular System, by John Hughes Bennett, M.D.;' Edinburgh, 1852.

With reference to the value of test of inoculation, some difference of opinion exists. Whenever inflammation and suppuration of the cellular tissue, or lymphatic glands of the groin, is owing to any other cause than the occurrence of chancre, the pus secreted furnishes no result from inoculation, at whatever periods and under whatever circumstances the test may be made. Neither does it follow, of necessity, that buboes succeeding to true chancres will furnish a specific pus, and consequently, by inoculation, a characteristic pustule. That this may occur, it is necessary that the bubo shall not merely be owing to a simple sympathetic inflammation, but that actual absorption of the specific matter of the chancre shall have taken place. When absorption of the matter from a chancre on the genitals takes place, it is generally confined to the superficial glands of the groin; and most frequently the syphilitic poison is conveyed to one gland only, although many of the glands in the immediate vicinity of the latter, both superficial and deep-seated, are inflamed, and suppurate at the same time, so that the matter taken from one gland shall be purely syphilitic, and give rise, by inoculation, to the characteristic pustule, while those in its immediate neighbourhood shall be affected by simple phlegmonoid inflammation, the pus from which shall, when tested by inoculation, give a negative result.[1]

It may be very readily conceived that the irritation produced by the passage of the syphilitic poison through a lymphatic vessel and ganglion may excite in the neighbouring organs an inflammation which is not specific, but merely phlegmonous; and this appears to be the true nature of the case. M. Ricord opened a bubo which had succeeded to a chancre, the pus from which produced no result by inoculation. In the centre of the abscess he discovered an enlarged lymphatic gland, presenting an evident fluctuation; this was punctured and tested by inoculation; the characteristic pustule of chancre was obtained.

---

[1] See Ricord, op. cit., pp. 142 et suivantes.

Discharges from the urethra are of two kinds, resulting either from the existence of a true syphilitic ulcer in some part of the passage, or owing to gonorrhœa properly so called.[1] Chancres, or syphilitic ulcers of the urethra, to the consideration of which we shall return in a particular chapter, are in all respects, except situation, of the same character as other primary sores, and give rise to the same results when the matter is tested by inoculation.

The matter of gonorrhœa, applied upon a mucous surface, produces an inflammation and discharge of the same character. In no instance can it produce a true syphilitic sore, although by remaining in contact with a mucous surface for a certain period of time it may occasion a greater or less degree of excoriation, but is not capable of producing a specific ulcer, as the researches of Ricord,[2] Hernandez,[3] Dr. Egan, and myself incontestably prove.

The diseases which are consecutive to gonorrhœa, as sympathetic buboes, &c., do not secrete pus capable of producing a specific ulcer by inoculation, neither do secondary or constitutional symptoms generally succeed to a simple gonorrhœa. In the rare cases where secondary symptoms have been said to have followed a simple gonorrhœa, it has been supposed that the diagnosis of the primitive disease has been inexact, that the diseased surfaces have not been properly examined, and the cases have been concealed chancres of the urethra, and not gonorrhœa. It is also extremely probable that such were the forms of disease which embarrassed Dr Wallace, who says that he had met with some forms of discharges from the urethra which were beneficially influenced by mercury, and which he was unable to cure without its exhibition.

---

[1] See the chapter 'On Gonorrhœa' for a fuller explanation of this remark.

[2] 'Mémoires sur quelques Faits observés à l'Hôpital des Vénériens, par P. Ricord,—Mémoires de l'Académie Royale de Médecine, tome 2^{me}.

[3] 'Essai Analytique sur la Nonidentité du Virus Gonorrhöique et Syphilitique, par J. F. Hernandez;' Toulon, 1812.

The pus of gonorrhœa, tested by inoculation, gives no result: it may be followed by inflammation, but never produces a specific sore; injected into the urethra, it produces a disease like that of which it is the product; applied externally between the glands and prepuce, it occasions inflammation and discharge, balanitis, or external gonorrhœa; a similar effect follows its application upon other mucous surfaces.

The results of inoculation in secondary or constitutional diseases have seemed to favour the opinion that the pus of a constitutional syphilitic sore is not inoculable; but it must be recollected that the experiments which led to these conclusions were performed on patients who were themselves the subjects of the constitutional disease. The results were fallacious; they led to the opinion that secondary syphilis was not contagious. I have always maintained the opinion that secondary syphilis was under many and certain forms communicable from the diseased to the healthy, without the intervention of any primary disease. The cases on record, which prove this beyond the possibility of question, are now so numerous that it would be a waste of time to quote them. The results of experiments also prove it. The late Dr Wallace, M. Waller of Prague, and others, have proved by experiments that secondary syphilis can be propagated by inoculation from the diseased to the healthy. The question has been entirely set at rest by the inoculations of the reporters of the Imperial Academy of Medicine in 1858. As these experiments, and the deductions made from them, constitute an event in the history of syphilis, and are of themselves so important, I shall quote them:

"On the 25th of October, 1858, the Minister of Commerce, Agriculture, and Public Works addressed a letter to the Imperial Academy of Medicine, requesting, *in the interest of practical medicine and of medical jurisprudence*, to be furnished with answers to the two following questions:

"1st. Are the accidents of constitutional (secondary) syphilis contagious?

"2nd. As regards contagion, is there a difference between constitutional syphilis in infants at the breast and in adults?

"A commission, composed of MM. Velpeau, Ricord, Devergie, Depaul, and Gibert, was appointed to reply to these questions. Their report, drawn up by M. Gibert (the author of various works on diseases of the skin), was presented to the Academy on the 24th of May.

"The report begins by stating that, although the contagiousness of secondary syphilis has been denied by some, clinical facts and experimental researches proved that various secondary symptoms were contagious, and that certain of these, particularly condylomata (*papules* or *plaques muqueuses*), syphilitic ecthyma, and ulcers of the throat, could be communicated by inoculation. The members of the commission, however, felt themselves in some difficulty—should they rest satisfied with the results of others, or should they repeat the experiments for themselves? After full consideration, they decided that although such a mode of investigation is in general highly objectionable, they would, in the present instance, be justified in repeating the experiments which proved the transmissibility of syphilis by inoculation. After the experiments had been performed, the reporters arrived at conclusions absolutely identical with those which had been announced by Dr Rinecker in 1852. These are as follows:

"1. The local lesions consecutive to the inoculation of the matter of secondary syphilis never appear before the end of the second week, in general they are delayed till after the fourth; *the length of the period of incubation is characteristic.*

"2. The first change subsequent to inoculation invariably manifests itself at the point where the inoculation was performed; it remains for a considerable time limited to this point; its progress is essentially chronic—so much so, that when no treatment is employed, the first local affection remains until the appearance of the constitutional symptoms.

"3. The local affection appears in the form of tubercles, which ulcerate after a time, and are generally accompanied with swelling of the lymphatic glands.

"4. The constitutional symptoms scarcely ever appear within a month of the local manifestations; they are generally delayed much longer.

"These phenomena differ widely from the symptoms of primary syphilis, whether contracted or communicated by inoculation, and would of themselves be sufficient to establish the contagious property of the secondary affections. The anti-contagionists maintain that a chancre is invariably the only characteristic symptom of syphilis at its commencement; that the typical venereal chancre, or, as it is now termed, the indurated or infecting chancre, is an ulcer generally preceded by a pustule (which appears without any period of incubation); the ulcer becomes indurated more or less rapidly, but always within a week from the contraction of the contagion; so that, in the case of the primary chancre, we have absence of incubation, the elementary form pustular, ulceration, induration always consecutive to the ulceration. Whereas, in the communication of the secondary affection, we find a period of incubation of eighteen to twenty days or more, the elementary form papular, then tubercular, and finally conversion of the tubercle into an ulcer covered with a crust.

"These conclusions of the reporters are based upon the results of four experiments, taken in connection with the numerous observations already published. The subjects of the experiments were all individuals previously free from syphilis, but affected with lupus. This class of persons was selected, as it was thought better to choose them than to fix upon perfectly healthy persons, and because it was considered that the constitutional treatment adopted for the syphilis (in the event of its being communicated) might possibly have a good effect upon the lupus. The following may be taken as a specimen of these observations:

"An adult, affected from childhood with lupus of the face, was inoculated with syphilitic matter in the following manner: To a raw surface on the left arm, produced by the action of ammonia, was applied a piece of lint dipped in the purulent matter obtained from a condyloma near the anus. The condyloma was of fifteen days' standing, and had followed a chancre which dated from fifteen months. Fourteen days after the inoculation, a slight degree of redness appeared. On the eighteenth day, there appeared at the seat of inoculation a prominent papule of a coppery colour. On the twenty-second day, the papule had increased in size, and there was a slight oozing from its surface; this oozing became purulent, and dried up into a thin crust. On the twenty-ninth day, one of the glands in the corresponding axilla was enlarged. On the thirty-second day, after a vapour bath, the crust became detached, and a very superficial excoration was brought into view. On the fifty-fifth day, the papule had become elevated and indurated, and constituted a real tubercle, with a slight ulceration in the centre; at this time, too, several blotches and reddish papules were visible on the trunk; these papules became converted into pustules of acne, and spread over the palmar surface of the upper extremities, over the belly, the inner surface of the thighs, the groins, &c. Ten days later, the patient was put under the specific treatment. At the date of the report, after six weeks of treatment, the tubercle of the arm was gone, and had left a superficial cicatrix; the axillary glands were still enlarged; the eruption on the trunk had begun to disappear.

"The other three experiments were attended by very similar results.

"Judging from these, and from similar observations recorded by others, the commission concluded that there could be no doubt of the contagiousness of secondary syphilis.

"The second question, regarding the contagiousness of syphilis in infants, admits of an equally explicit answer. All practitioners have seen, all authors have reported, cases where the nurse has been infected by the nursling: the opposite cases, where the nursling has been infected by the nurse, are less common, because, as can readily be supposed, nurses who show any symptoms of the disease will not easily find persons to commit their infants to their care. Still, instances of the latter class are undoubted, and some additional observations have lately been published.

"In conclusion, the commissioners recommended the Academy to return the following answers to the ministerial questions:

"1. Some of the manifestations of secondary or constitutional syphilis are evidently contagious; at the head of these is to be placed the condyloma.

"2. The same rule applies in the case of nurses and infants as in other subjects; and there is no reason to suppose that in infants at the breast, the product of these accidents has *properties different* from those which it possesses in the adult."—Quoted from 'Edinburgh Medical Journal,' September, 1859.

I introduce one or two cases, by way of illustration. I have not here entered into the mode in which contagion has taken place; this I shall consider when speaking of the causes of secondary syphilis. I could multiply these cases, but it is unnecessary.

CASE III.

Syphilitic lepra, with alopecia in the husband; the same disease communicated to the wife; cure of both by moist mercurial vapour.

A gentleman contracted a superficial primary sore, which healed without leaving a mark or induration behind it. Being apparently in good health, he married. Three or four months after his marriage, he perceived on his body numerous red, smooth, elevated, scaly blotches; very shortly his wife broke out with an eruption of similar character; and the hair came off rapidly in both patients. In this state they were sent to me. Neither had any primary disease, and the lady had never had the slightest irritation in the genito-urinary organs. I examined them both frequently and carefully, and I am positive the wife had never suffered from sore, excoriation, or discharge. I placed them both on a rigid diet, and the use of the moist vapour of the bisulphuret of mercury. In about six weeks they were both apparently well, and have remained so for three years.

CASE IV.

A gentleman, who had suffered both from primary and secondary syphilis, married, after having been free from all symptoms for twelve months. Soon after this he had another eruption and sore throat; his wife became affected with the same eruption, excavated ulcers of the tonsils, and was prematurely delivered of a dead child in the sixth month of her pregnancy. Both patients lost their hair and eyebrows. On account of the obstinacy of some of the symptoms in both these cases, they were sent to me from a distance to be treated by the moist vapour of mercury, under the use of which they both perfectly recovered. In this case the lady was more than once carefully examined: she was free from all evidence of any form of primary disease, and never had suffered from the least irritation in the parts.

There can be no doubt that in both these instances the secondary taint was communicated from the husband to the wife. It will be remarked that both were affected precisely with the same symptoms, both had the same character of skin disease, and both lost their hair and eyebrows—a very strong conviction to my mind of the mode of contagion. If the husband communicate a primary disease to the wife, and the primary disease in both be followed by secondary symptoms, it amounts almost to a certainty that the symptoms which accompany the constitutional taint will differ in each; but where secondary diseases are communicated, they are generally, as far as the skin is concerned, alike, as the two cases detailed sufficiently prove, and as Dr Wallace had already remarked, that all forms of syphilis produce their like.

In illustration of the first proposition of the constitutional symptoms being different, when primary diseases are communicated, I bring forward a case.

CASE V.

A man, S. H—, and his wife, were admitted into the Queen's Hospital at the same time, under my care, for a syphilitic eruption on each. The husband had a papular eruption, the true venereal lichen, and the wife a well-marked pustular disease. Twenty-three weeks before their admission the husband contracted chancre, and three weeks after his wife had primary symptoms, an ulcer on the inside of the right labia, with redness and tumefaction of the os uteri.

The husband here contracts primary disease, followed by secondary disease in the form of a papular eruption; he communicates the primary disease to his wife, who suffers from a pustular eruption. If he had communicated the secondary form, her skin disease would also have been papular.

M. Cazenave, whilst admitting the rarity of the contagion of secondary symptoms, says, "that it is impossible to deny its occurrence, but that certain local circumstances are indispensable to such a result; these are a humid or moist secreting surface and prolonged contact;" ('Traité des Syphilides,' p. 385;) and hence we see that these conditions are fulfilled in persons habitually sleeping together, as husband and wife, mother and child, &c. &c. Whilst these secondary symptoms are rarely capable of propagation by inoculation, they are frequently contagious under the circumstances mentioned, which the facts adduced sufficiently prove.

From these facts I make a few simple deductions, which young surgeons would do well to note.

1. That it is wrong for one person affected with a secondary venereal taint to sleep with a healthy individual, especially if the former be affected with a form of disease in which there is a breach of the surface. This remark applies to husband and wife, and diseased children and healthy nurses, or the reverse.

2. A diseased child should never be suckled by a healthy nurse;[1] neither should a healthy child be placed with a diseased

---

[1] See Clinical Lectures (No. 7, p. 332), by Dr. J. H. Bennett, of Edinburgh, for the details of a case, where two nurses recovered compensation from a surgeon from a circumstance of this kind. A diseased child was placed with a healthy nurse, who was kept in ignorance of the fact, though the physician and the father were aware of the nature of the disease. In the space of two months the nurse had ulcerations on the nipples, ulcers in the throat, and lost her hair. She also exhibited symptoms of general cachexy; the symptoms were so marked as to be detected by the least experienced observer. The nurse sued the parties who placed the child with her before the "Tribunal of the Seine," for damages done to her health in consequence of disease having been communicated to her by a child suffering from an hereditary venereal taint, the parties who placed the child with her knowing at the time the child was so affected. She recovered 5,000f. damages. Five of the special medical examiners who gave evidence in this case were of opinion the disease was certainly communicated from the child to the nurse; the third thought it probable that the disease was so communicated.—'Archives Générales de Médecine,' Sept. 1856, p. 374.—Another

nurse. We cannot be too careful in examining wet-nurses, before their introduction into families; they are most commonly the mothers of illegitimate children, and therefore the greater need for caution. Not only the external parts, but the vagina and os uteri should be examined before a positive opinion as to the health of the woman be given.[1]

---

case is recorded in the 'Journal de Médecine et de Chimie Pratique,' March, 1858. A diseased child was put to a healthy nurse: the child died from syphilis; the nurse became diseased; she recovered 320*l.* damages and all costs.

[1] Mr Whitehead's (of Manchester) Cases, p. 368.

M. Waller, of Prague, published in 1851 an account of his researches on the contagion of secondary syphilis. This paper is published in M. Cazenave's 'Annales de la Syphilis,' 1850-51, t. iii., p. 174, &c. The results at which M. Waller arrives are the following:

1. Inoculation with the pus of a primary venereal ulcer produces, *under certain circumstances*, a primary ulcer of a like character; inoculation with the secretion of secondary syphilitic ulcers never produces ulcers having the characters of chancres.
2. Inoculation with the secretion of secondary syphilitic ulcers, on healthy subjects, produces in them secondary syphilis. Both primary and secondary syphilis, then, may be propagated by inoculation; the pus of primary syphilis produces primary syphilis, the pus or secretion of secondary syphilis produces secondary syphilis. (See p. 187 of the translation by M. Axenfield, in the third volume of Cazenave's 'Annales.') See a valuable *résumé* of modern opinions, in two papers by Follen, in the 'Archives Générales' for January and February, 1856. These papers contain many facts, distinctly demonstrating the contagious and inoculable character of many forms of constitutional syphilis.

It is singular how closely the results of these experiments coincide with the facts already detailed by me in the cases which I have related.

CHAPTER IV.

OF THE FIRST CLASS OF PRIMARY SYPHILITIC DISEASES[1]—GONORRHŒA, ITS VARIETIES, COMPLICATIONS, AND CONSEQUENCES.

OF BALANITIS.

INFLAMMATION OF THE GLANS PENIS—BALANO-PREPUTIAL OR EXTERNAL GONORRHŒA—CHANCROUS EXCORIATION, ETC.

THIS disease is characterised by more or less redness, and a muco-purulent discharge from the surface of the glans penis, with or without excoriation. Balanitis rarely occurs alone, but is more frequently complicated with a similar condition of the internal surface of the prepuce (posthitis). It is then termed balano-posthitis. As it is rare to see the affections separate, I shall consider both under the title of balanitis.

This affection may have a purely venereal origin,[2] or may succeed to intercourse with women labouring under leucorrhœa, or other simply inflammatory affections of the vagina, when this part is covered with secretions of a more or less irritating character. The menstrual discharge will also frequently occasion balanitis; I have frequently seen great anxiety arise to married men who have suffered from balanitis, the result of intercourse with their wives in one or other of the above-mentioned states. Balanitis sometimes owes its origin to a natural conformation of parts, and hence subjects with a natural phymosis, or small preputial opening, may be considered as predisposed to it.

---

[1] Synonyms:—"Affections non-virulentes,"—Ricord. "Maladies primitives à forme érythémateuse,"—Desruelles. "Catarrhal primary syphilis,"—Wallace.

[2] "It is denied by many that the present variety of disease ever arises from the venereal poison, or that it even leads to secondary symptoms; and it is affirmed to be the consequence of numerous causes of common irritation. Now it must be admitted, that causes of common irritation often produce excoriations of the glans, corona, and prepuce, for this is a daily occurrence. It is also notorious that such excoriations may be produced without sexual intercourse, from acrimony of the natural secretions of the part, &c. But I have often had equally conclusive proof that the present variety of disease may arise from the application of secretions containing the venereal poison." Wallace, p. 222. Vidal (de Cassis), p. 119, is of the same opinion, and states that in several instances the pus of a balanitis, where there has not been the least breaking of the skin, has produced the characteristic pustule of chancre when inoculated. These, I believe, are rare cases, but they do happen. I have seen and treated one case, where I believed the disease to be nothing more than balanatis; but the wife had secondary symptoms,

The treatment of uncomplicated balanitis is extremely simple. When the glans can be denuded, and the inflammation is not very acute, the solid nitrate of silver may be passed slightly over the surface, covering it with a piece of fine soft linen, and then bringing the prepuce forwards over the glans. The penis should be covered with linen compresses soaked in cold water, or the liquor plumbi diacetatis dilutus, and the linen between the prepuce and glans renewed twice in the day; at each renewal of the linen, the parts should be washed with an astringent lotion.[1] It will be occasionally found that lotions of all kinds tend to keep up the irritation. When this is the case, the surface of the glans should be thickly dusted with an astringent powder;[2] this tends to allay the irritation, by absorbing the acrid secretions, and preventing any friction between the glans and prepuce. If the inflammatory symptoms accompanying balanitis run high, and are complicated with phymosis, the patient should be kept quiet, and live low. Weak astringent injections, or an aqueous solution of opium, may be thrown up between the glans

---

scaly blotches, and nodes. Dr Wallace has recorded another. I have lately treated two other cases, which had at the commencement only the symptoms of balanitis,—redness, purulent discharge of the under surface of the prepuce and glans penis, without ulceration. In a few days the prepuce began to thicken, and the glands in each groin became enlarged and tender, but had no disposition to suppurate. Both cases were followed by serious constitutional symptoms, both in the throat and on the skin.

[1] ℞ Zinci sulph., gr. iv;
Aquæ rosæ, ℥viij. M. ft. lotio.

[2] ℞ Zinci oxydi, ℥j;
Hyd. chloridi, ʒj. M. ft. pulvis.

and prepuce. Desruelles speaks highly of continued injections or irrigations in balanatis, or balano-posthitis, resorted to when these diseases are complicated with phymosis. To accomplish this, a small canula may be fitted to one of Weiss's self-acting enema syringes; the canula, which should be made of caoutchouc or elastic gum, is to be passed between the glans and prepuce, and thus, without removing it, a continued stream of some narcotic or astringent injection[1] may be thrown gently up for some minutes together.

The causes of external gonorrhœa are to be sought for in the natural conformation of the penis on the part of the male, and various morbid conditions of the vagina or uterus on the part of the female. A natural phymosis predisposes the patient to contract this form of disease: for instance, a person having natural phymosis cohabits with a female having various morbid discharges from the vagina; the discharge gets under the prepuce, and is there retained, as the patient cannot withdraw it to wash the part; the discharge excites inflammation of a more or less active character, which would all have been avoided if the glans could have been retracted and the part washed with a little soap and water. The secretion of the glandulæ odoriferæ, as they are termed, also of itself produces a form of balanitis, without even exposure to impure connection. This secretion, which, in some persons, is extremely abundant and offensive, is retained by the elongated prepuce on the base and surface of the glans, there irritating and inflaming the parts, and ultimately producing adhesions between the glans and prepuce. Sometimes, when there is a very narrow preputial opening, and the discharge cannot make its way out, large collections of matter are formed, and the

[1] ℞ Decoct. papaveris, Oj;
Aluminis ust., gr. xx. M. ft. injectio.

Simple tepid water, with alum in the proportion of eight or ten grains to the pint, forms an exceedingly useful injection, particularly when large quantities are used.

℞ Cerati simplicis, vel mellis,
Olei olivæ, āā ℥j;
Hydrargyri chlorid., ʒss;
Ext. opii, ℥j. M.

The above preparation may be introduced between the glans and prepuce by means of a camel-hair pencil; a remedy of great value.

patient, unless an operation is performed, is only relieved by gangrene, or sloughing of the whole prepuce. I have been called to several cases where such a termination has taken place.

CASE VI.

I was sent to see a young gentleman, about 17 years of age, whose disease occasioned the utmost alarm to his friends. On examining the patient, I found the penis enormously swollen and dark coloured, and a distinct gangrenous spot, about the size of a shilling, situated near its extremity, under which fluctuation was evident. The prepuce was long, so swollen, deformed, and œdamatous, that it was impossible to make out the situation of the preputial opening. I was convinced that it was a case of balanitis with occlusion of the preputial opening. I made a deep incision through the black spot into a collection of matter between the glans and prepuce, after which, with ordinary treatment, the patient speedily recovered.

The chief causes of balanitis are to be sought for in the condition of the female vagina. "In examining the vulva, vagina, or neck of the uterus, in females labouring under discharges which have produced balanitis or gonorrhœa in the male, we have observed the mucous membrane covered with papulæ or follicles, more or less developed, constituting a papular vaginitis or utero-vaginitis, sometimes assuming the form of small spots, in size not larger than a pin's head, isolated, or more or less confluent. On the same portion of the mucous membrane we have distinctly seen patches more or less numerous, and varying in extent, which have a striking analogy with the suppurating surfaces of the skin, on which a blister has been applied. Again, in some forms of blennorrhagia in the female, we find the mucous membrane of the vagina of an uniformly red colour. At other times the redness occurs in isolated patches, with swelling, heat, and pain, unattended by any secretion. Other cases of this kind give rise to a morbid secretion, the colour and consistence of which are variable. The differences in the character of the secretions appear to have no reference to the causes which have produced them. The discharges from the urethra, vulva, vagina, and uterus are very various; but the difference has not appeared connected with any one particular lesion more than another. The acute stage generally, whatever may be the particular lesion, causes at its commencement a secretion almost wholly serous, or only consisting of mucus more abundant than usual, which afterwards becomes opaque, purulent, or of a darkish yellow colour, sometimes green, sometimes mixed with blood. The chronic stage often gives rise to a milky secretion of a thickish consistence, similar to that of cheese, or simply to a mucous flux. The chronic discharges also may put on a rusty appearance, and become tinged with larger or smaller quantities of blood. These secretions, whether in the acute or chronic stage, may have no smell, or, on the contrary, may have a very unpleasant odour, particularly where the mucous papulæ exist. The smell is often so decided, that it is characteristic in a great number of cases. The only differences which result from the particular seat of the blennorrhagia are, that the secretions which come from the uterus are always more mucous, thready, and collected into flocculi; whereas those which escape from the urethra, vulva, or vagina, present a less tenacious character than the others.[1]

CASE VII.

A. B., a very healthy person that I well knew, who had never previously suffered from any venereal taint, consulted me with the following symptoms: profuse thick purulent discharge from the glans and prepuce, which, when washed off, left a red, patchy surface underneath, but not ulceration. The prepuce was much thickened and swollen. The local symptoms disappeared after a week's treatment by astringent washes and aperients; but the prepuce remained thickened and hard—not a defined induration, but a diffused hard swelling, extending all round its under surface. Soon after, one or two glands in each groin enlarged, and were slightly tender, but showed no disposition to suppurate. Six weeks after this the patient had an excavated ulcer on each tonsil, and well-marked patches of syphilitic lepra on the forehead, on the head, and on the chest.

---

[1] Acton on Venereal Diseases, pp. 172-3. There are several morbid conditions on the part of the female which produce balanitis in the male: there are the menstrual discharge, leucorrhœa either cervical or vaginal, various forms of vaginitis and urethritis with purulent secretion, and secondary syphilitic discharges from the uterus. In the cases where balanitis is distinctly of a syphilitic nature, as in the cases I have alluded to, I have no question that the disease is produced by secondary syphilitic discharges on the part of the female, and that it is a positive inoculation that takes place. I mention two cases which I think very important.

CASE VIII.

A patient, previously in good health, who had never had either gonorrhœa or syphilis, consulted me concerning what he called an "échauffement." He had purulent discharge from the glans and prepuce; redness, swelling, and thickening of the prepuce; but no breach of surface, no ulceration. The glands in each groin enlarged, but did not suppurate. Within two months he was covered with patches of syphilitic roseola.

There can be no doubt about the syphilitic nature of these cases; although the balanitis, which was here the primary symptom, did not differ in appearance from the same disease produced by causes which were not specific. The thickening of the prepuce might have been more marked in the syphilitic cases. Vidal, Blackman's translation, p. 169, quotes from the thesis of one of his *internes* thirty cases where the pus of a balanitis was successfully inoculated. A cautious opinion should be given by the young surgeon as to the consequences of a disease which resembles a non-specific balanitis.

Certain forms of vaginitis sometimes occur in patients of all classes, and under various circumstances, which are capable of producing balanitis in the male. I have seen one or two instances where an inflamed and irritable condition of the vagina in the female, during the latter months of pregnancy, has produced balanitis in the husband, and where a great deal of family distress has been occasioned by the circumstance.

CASE IX.

A lady, whom I well knew, the mother of seven children, in her eighth pregnancy, suffered from a white discharge, with swollen labia and much irritation. Her husband became affected with inflammation of the glans and prepuce, swelling of the penis, an abundant offensive discharge, and ultimately phymosis, the inflamed surfaces ulcerated to some extent. The case was obstinate, and occasioned much family annoyance. What is, however, very remarkable, and proved the nature and origin of the disease, was that with the accouchment the disease of the lady disappeared, and intercourse no longer affected the husband. In the ninth pregnancy the same symptoms occurred again in the wife, and produced a similar obstinate disease in the husband.

The symptoms of balanitis are heat, itching, and redness of the glans penis and the inner surface of the prepuce, the redness being disseminated in patches, as though the surface of the part had been slightly scalded with drops of hot water sprinkled over it. These symptoms are accompanied by a muco-purulent discharge from the preputial opening; and if the glans can be denuded, its whole surface and that of the prepuce are covered with an adhesive flaky matter looking like curd. This is the condition if the glans can be denuded; if it cannot, all we generally observe is a muco-purulent discharge from the preputial opening, though not from the urethra, with heat and swelling at the end of the penis. In fact, the balanitis itself is the most common cause of our not being able to denude the glans penis; the inflammation produces the phymosis, which was not present till the balanitis was contracted. Again, the phymosis may be congenital.

Discharges from the end of the preputial opening, however, with a natural or acquired phymosis, are not all dependent upon balanitis, as I have described it. They may result, and commonly do result, from a chancre or ulcer, situated either on the glans or prepuce, and producing the inflammation with the discharge from the preputial orifice. If an ulcer of any standing be the cause of the mischief, we can generally detect it from a partial induration felt at the same part of the prepuce under the skin, and a peculiar soreness and tenderness existing in this part, when the penis is pressed or rolled between the fingers. These would be the distinctive symptoms to guide us in a differential diagnosis between phymosis with chancre, and phymosis the result of pure balanitis, since both diseases would be characterised by the same, or pretty nearly the same general symptoms; viz., swelling and heat of the end of the penis, with phymosis and discharge from the preputial opening. A balanitis might again exist with a pure gonorrhœa; this is very common, but in this instance the discharge from the urethra can be seen. I mention these complications of balanitis, because their existence in balanitis would materially modify the treatment.

Balanitis is in many instances complicated with phymosis, and the question naturally arises whether this is to be relieved by an operation or not. If the phymosis be a congenital one, and the patient have contracted a balanitis, in most instances the operation should be performed, as the continuance of the phymosis predisposes the patient to a number of those inconveniences mentioned before—adhesions between the glans and prepuce, and thickening of the latter from chronic inflammation. If the phymosis be an acquired one, produced by the disease, the operation should not be performed. Poultices, cold lotions, purgatives, and, above all, the calomel and opium pommade, will in a few days, in almost every case, enable us to retract the prepuce. An operation in the latter case is unwarrantable; whilst in the former it is not only justifiable, but highly advantageous. We shall have more to say of the operation for phymosis when speaking of primary venereal sores complicated with it; but in cases of uncomplicated balanitis, the rules I have given are safe, and have been proved by myself time after time in practice. Balanitis may, if neglected or badly treated, continue for an indefinite period of time; may run on into conditions of superficial ulceration; may produce adhesions of the prepuce to the glans, either partial or total; thickening of the prepuce, and, according to Roux, cancer of the penis. Again, it commonly produces enlargement of the glans in the groin, and occasionally bubo. I have seen the latter in many instances.

Secondary symptoms may succeed to what appears a mere simple balanitis. I have already given several examples of this. If balanitis or chancrous excoriation is suffered to continue for an indefinite period of time, a thickening of the diseased surface always occurs, and a chronic suppuration is established from the abrasion covering the thickened part. In this state of things secondary symptoms will occur in the male, and may be produced in the female, when cohabitation is permitted under such circumstances. I have seen eruptions accompanied by a node on the forehead, loss of the hair, and other symptoms of constitutional syphilis, produced in the wife, where this species of abrasion, with thickening, were the only symptoms in the husband. Some cases have been brought forward in which constitutional symptoms, characterised by copper-coloured patches and papulæ, succeeded to balanitis or discharge from the external surface of the glans and from the prepuce, without ulceration or breach of surface. In the cases mentioned, this external gonorrhœa was followed by the falling off of the hair, and eruptions precisely similar to those which follow primary venereal sores. In the first case, the patient had never before any venereal affection till he contracted a balanitis characterised by redness, heat, and itching of the external surface of the prepuce, to which succeeded a purulent discharge.

This form of disease is considered by many modern writers as a variety of gonorrhœa, differing from the urethral variety merely in its seat; but it is very frequently a syphilitic symptom. In the cases already alluded to, this external gonorrhœa or balanitis was followed by falling off of the hair, and eruptions precisely similar to those which succeed to venereal sores. In one case, the patient had never before had any venereal affection till he contracted a disease characterised by redness, heat, and itching of the external surface of the glans penis and neighbouring portion of the prepuce, to which succeeded a purulent discharge, *without any kind of excoriation or wound.* This was followed "by copper-coloured patches on the forehead and chest; and a female, with whom this patient cohabited, became affected with heat and swelling of the genitals, pain in making water, and, two months after, an eruption on the inside of the thighs, in the nose, and on the forehead. The female was declared diseased; put on the use of mercury, with sarsaparilla, and recovered. The patient (the male) took to himself a second mistress, still suffering from the affection (balanitis), which he did not consider syphilitic, the first mistress having married after recovery. This second mistress soon became affected with the same symptoms as the first, and, two or three months after, a constitutional affection made its appearance, which ultimately assumed a pustular form. The prospect of an advantageous marriage presented itself, and our patient now separated from his second mistress, and married. In a short time the wife was affected, as her temporary substitutes had been before, and subsequently with eruptions of a like character. The patient and his wife now put themselves under medical care; and the surgeon stated that the only disease in the genitals with which the husband was affected was redness of the glans penis, with purulent discharge; no ulceration, breach of surface, or trace of cicatrix. The patients were put upon mercurial treatment, and both perfectly recovered." These primary forms of disease in the glans and prepuce, marked or characterised by discharges, without ulceration, have of late been supposed to be precisely identical in their character with gonorrhœa, differing from it only in their seat. I am inclined, from observation, however, to believe in many instances this analogy is not correct, though it may hold good in some, since what appears a mere catarrhal affection in the first instance, frequently degenerates into ulceration more or less extensive.

I have in private practice, not only in one, but in several instances, seen a superficial sore appear before a patient was well of the balanitis, and this sore followed by a bubo; in these instances a fresh infection was impossible. The distinctions are perhaps not very clearly defined between a pure catarrhal inflammation of the glans and prepuce, and those very mild forms of syphilis which some writers have termed superficial. Dr Wallace has recorded a case bearing upon this point, which, in a practical point of view, is so instructive, that I shall introduce it here.

"A lady was brought to Dublin on account of an eruption, and a state of general ill health. She had been some months married, and was pregnant. The eruption did not appear of a doubtful character. It was a syphilitic eruption, of a rubeoloid form, and was accompanied by its almost constant attendants, a superficial disease of the fauces, and a condylomatous state of the pudenda and of the orifice of the anus. There were also small condylomota in the axillæ. I communicated my opinion to the husband of the lady, who had accompanied her to town, and he denied that he had ever had any venereal disease; but he at the same time admitted, that some months before his marriage he had got, in consequence of a suspicious intercourse, what he called a chafing; that he had consulted Mr M., who directed for him a wash, by which the disease was removed; that he had been assured by this gentleman that the complaint was not venereal, and did not require mercury; and that he had taken the precaution of submitting himself to examination before marriage, with the view of making his mind sure that he had no venereal taint: but, on examining him, I found a very slight oozing at the corona, with a very slight thickening of the corresponding portion of the lining of the prepuce; and there existed on some parts of his body slight cutaneous desquamations of a suspicious character."[1] The lady miscarried of a dead child, and the husband and wife were placed under mercurial treatment, and recovered.

Balanitis is exceedingly liable to return, without any evident cause, after it has been supposed to be cured. It breaks out again and again, at uncertain intervals, showing the irritation still to exist which produced it in the first instance. Sometimes the irritation reappears in its original form, sometimes it gives rise to herpes preputialis, or to eczema of the glans, or to minute and superficial ulcerations, which, after repeated returns, leave behind them some thickening, which may give rise to mild constitutional symptoms, and is capable of producing disease in the female, as the preceding remarks and cases fully show. In such cases the patients must be put on general treatment, a mild mercurial course, the hydriodate of potass with sarsaparilla, and the mercurial vapour bath.

---

[1] Wallace, pp. 229-30.

CHAPTER V.

OF GONORRHŒA.[1]

GONORRHŒA, or blennorrhagia, consists in an inflammation, more or less acute, of the mucous membrane of the urethra, or other parts of the genito-urinary passages, accompanied by the secretion of a muco-purulent fluid of a yellow or greenish appearance; pain, itching, or irritation in voiding the urine; with, in the male, repeated and involuntary erections of the penis.

Gonorrhœa, or blennorrhagia, in the male is an urethritis produced by the application of an irritant to the lining membrane of the urethra; and this irritant, in a vast majority of cases, is a discharge from some part of the sexual organs of the female. By referring to what I have already said on the varied character of these discharges, in the chapter 'On Balanitis,' it must at once be perceived that this irritant on the part of the female is of very different characters; at one time non-specific, and at other times of a specific nature. This might have been imagined from the great diversity in gonorrhœas, whether these relate either to their symptoms, duration, complications, consequences, or mode of cure. I am perfectly persuaded, both from observation and from experiments, that in addition to the causes of urethritis, hereafter mentioned, that the syphilitic virus is occasionally, if not frequently, the cause of a gonorrhœa, and I believe that very commonly the discharges from the uterus which are due to secondary syphilis produce this effect. (See the chapter 'On Syphilis of the Uterus.') This opinion will explain the occasional occurrence of unmistakeable constitutional syphilis after a gonorrhœa. I admit that these cases are comparatively rare, but every surgeon of moderate experience in the treatment of syphilis must have observed them. I do not mean to deny the existence of discharges which are owing to the presence of a chancre in the urethra; but there are cases of gonorrhœa, which are due to the action of the syphilitic virus on the lining membrane of the urethra, which are distinct from these; and such diseases are most probably occasioned by the pus of secondary syphilis.

---

[1] "Urethritis, acute or chronic," — Desruelles. "Blennorrhagia,"—Swediaur. "Venereal or syphilitic catarrh,"—Wallace.

Varieties of gonorrhœa:—

First species—Gonorrhœa in the female:

Varieties, seated in
- the vulva,
- the vagina,
- the uterus,
- the urethra,

may exist alone, or variously combined.

Second species—Gonorrhœa in the male:

Varieties, seated in
- the urethra,
- on the prepuce, or
- the glans penis,

may exist alone, or variously combined.

The late Mr B. Bell was of opinion that discharges from the male urethra, accompanied by heat and scalding on making water, may succeed to connections with women suffering from fluor albus.[1] He merely remarks, that such discharges generally subside much more quickly than an ordinary gonorrhœa. He mentions its continuance from this cause eight or ten days, and cautions young practitioners against giving precipitate opinions on such cases. I have frequently been consulted by persons labouring under discharges of this character, which have been communicated by females with whom they had been in the habit of cohabiting, and who had never perceived any disease till they visited their mistresses after dining out and drinking freely; then a discharge, with scalding on micturition, has been set up, which has continued a few days, been rendered worse by specific remedies, and yielded to low diet, aperients, and an injection.[2]

---

[1] See a remarkable case recorded by him, vol. i., p. 425, of his Treatise on the Venereal Disease.

[2] "Both sexes are liable to complaints that very closely resemble the gonorrhœa. This occurs to men who have an irritable stricture, or at least an irritable urethra, who find on some excitement a sudden appearance of copious discharge; and, if it appear after intercourse, it may be as soon as twelve hours, is at once of a purulent character. The symptoms of this spontaneous complaint usually remain a short time without increasing, and then cease without any apparent cause, or decided course of treatment."—J. P. Vincent, 'Observations on some Points of Surgical Practice,' p. 328.

CASE X.

A gentleman contracted a gonorrhœa in South America, which disappeared under treatment. On returning to this country he perceived, the day after intercourse, a profuse purulent discharge from the urethra, which at first had many of the characters of gonorrhœa, though unaccompanied by scalding or chordee: the disease disappeared in a few days. The same discharge appeared frequently after intercourse, especially if the patient had been drinking wine previously. No disease was communicated to a healthy female by this discharge after repeated intercourse. It always disappeared with a few days' low diet and a mild aperient.

This is the type of a class of cases which are common, and which generally yield to the treatment mentioned, to which a weak astringent injection may be added should they prove obstinate.

Gonorrhœa, though most commonly due to promiscuous intercourse, and termed a venereal disease, is an affection of a totally different character to the primitive syphilitic ulcer. I have already explained the circumstances under which the syphilitic virus may act as a specific irritant on the urethra.[1]

---

[1] See Ricord, and the authors quoted by him in his work already referred to; also Cullerier, in Lucas Championnière's work, p. 384, &c. &c. The whole history of the pathology, consequences, terminations, complications, and the effects of remedies in the treatment of gonorrhœa, mark it as a disease distinct from chancre. This was the universal belief in this country, with few exceptions, prior to the time of Ricord, who confirmed what British surgeons already believed and acted on; yet, with all this, there do occur from time to time cases of secondary syphilis, in no way to be distinguished from those which succeed to chancre, which own as their source and origin discharges from the urethra only, which discharges apparently in no way differ from common gonorrhœa, and on examination of the urethra after the disappearance of such discharges, no vestiges of contraction or stricture, or any condition incompatible with a healthy organisation, can be detected: surely if a concealed or urethral chancre (which is evident enough in most cases where it exists) had been present in such instances, its healing must have left some mark behind. I do not deny the existence of urethral chancre, I have seen it frequently, but I say that in all the class of cases I have alluded to, the existence of chancre has been presumed, not demonstrated.

The causes of gonorrhœa are various; the most frequent, however, is cohabitation with a female affected with the same disease.[1] It is certain that inflammation, with muco-purulent

---

[1] The secretions from a healthy female will sometimes produce in certain individuals discharges closely resembling gonorrhœa; in fact, an urethritis. Hence some authors have believed in the spontaneous origin of this disease. (Skey's 'Lectures on Venereal Diseases,' p. 174.) Mr H. J. Johnson has recorded three remarkable cases of this kind ('On Gonorrhœa and its Consequences,' p. 32). I have frequently examined females in whom I could detect no disease, who were said to have communicated a gonorrhœa. This is also M. Ricord's opinion. In these instances, either there is some peculiar irritant in the ordinary normal secretions of the female inimical to certain persons, or the female becomes the deposit or vehicle for the virus, which not affecting her, nevertheless poisons her lover. Thus, a perfectly healthy female has intercourse with a diseased man: soon after this, she again has intercourse with a healthy man, to whom she communicates disease; but, on examination, she is found perfectly healthy, although she has diseased another. It so constantly happens, both with regard to chancres and gonorrhœa, that women who, on the most careful examination, are found apparently free from disease, have caused disease in others, that the doctrine of "mediate contagion" must be admitted. This doctrine had been already taught by Astruc, Swediaur, and a host of other writers on syphilis; but some recent experiments by M. Cullerier appear to set the matter at rest. I refer the reader for full details on this subject to M. Cullerier's memoir, 'Quelques Points de la Contagion Médiate,' &c., and to the sixth note in Ricord's Lectures on Chancre, by Fournier, Maunder's translation. I quote the two remarkable experiments of Cullerier.

"Louise Vaudet, aged 16, entered the Hospital of Lourcine, Ward of St Mary, No. 9, on the 10th of October, 1848. She bore on each thigh an ulceration with a grey floor and abrupt edges. The disease dated a month. She had not been treated, and on entering the hospital she was affected with a violent inflammation of the skin, covering the abdomen and the upper part of the thighs, which had been brought on by walking. Ordered baths, poultices, rest (in bed) during several days. When the examination of the genital organs could be made, no ulceration could be detected, either on the vulva or on the anus. The vagina was red; it was the seat of an abundant muco-purulent secretion, but without any ulcerations; the neck of the uterus was healthy. Dressings to the chancrous ulcerations on the thighs with lint soaked in aromatic wine; injections per vaginam with a solution of alum. Six weeks after the patient had entered the hospital, the ulcerations diminished by one-half, and the vaginitis was notably improved. On the 25th of November, after having ascertained beyond a doubt that the mucous membrane of the vulva and vagina was not ulcerated in any part, and that the discharge from these parts was not inoculable, I collected discharge from the urethra, may be the result of intercourse with women who labour under other various forms of disease, such as inflammation of the vagina, the lochial or menstrual discharges,

---

upon a spatula the pus produced by one of the inguinal chancres, and laid it in sufficiently large quantities in the vagina. I made the patient walk up and down during thirty-five minutes, taking care to watch her, so that she might not place her hand on the vulva. After this lapse of time, I placed upon a lancet a certain quantity of the vaginal secretion, and I inoculated with it one of the patient's thighs. I then washed with water the vagina and vulva; I carefully wiped the parts, and then washed them again with a strong solution of alum. Forty-eight hours after, the puncture of inoculation had produced characteristic pustule. I left it till next day, so that the experiment might be more certain, and then destroyed it with Vienna caustic. Nothing whatsoever appeared in the vagina; the inflammation was not increased; and after two months the patient quitted the hospital perfectly cured of the vaginitis, as well as of the inguinal ulcerations."

The second experiment was made upon Celestine X——, aged 24, who entered Lourcine, Ward of St Louis, No. 7, on the 28th of November, 1848. She bore on the left thigh an ulcerated bubo of two months' date, and which, according to her, had succeeded a pimple, which had only lasted for a few days, and which was seated on the internal surface of one of the labia majora. At the time of her admission into the hospital, no trace could be discovered of this pimple. The vulva, the vagina, the neck of the uterus, and the anus, were all in a perfectly normal state. The aspect of the ulceration on the thighs made me suppose that it was specific. On the day following, the 29th, the pus proceeding from the bubo was placed upon a spatula and laid in the vagina, care being taken to carry it as high as possible. The patient was then made to walk about for an hour, without knowing that she was the object of an experiment. She was taken back to bed; and I then collected as much as I could of the vaginal mucus, remarking to some pupils and young colleagues who surrounded me, that none of the pus introduced into the vagina could be seen, and that what I had on my lancet was entirely similar to the normal mucus. I inoculated one of the thighs, using the same precautions in washing as I did in the former case. After two days, the characteristic pustule rose, and I only destroyed it after forty-eight hours. The vulva, vagina, and the neck of the uterus were carefully observed during several days, but nothing appeared; the disease restricted itself to the thigh. I must not neglect to say, that although there was no sign of disease in the interior of the organs of generation, yet I made on the same day an inoculation with the mucus with which they were covered, and obtained a negative result."

These experiments distinctly prove that the female may be the vehicle of disease, yet not herself be diseased; that the vagina may be the receptacle fluor albus,[1] ulcerations of various kinds not syphilitic, secondary syphilitic ulcers of the os uteri, and other morbid conditions, amongst which Cullerier and Ratier specially mention the cancerous ulcer. It appears to me evident that, in the present state of science, it is impossible with certainty to ascertain what may be the true cause of that gonorrhœa which succeeds to cohabitation, unless the female be submitted to examination with the speculum: and hence little confidence is to be placed upon any statements of this character, unless the speculum have been employed as a means of confirming our diagnosis; the condition of the constitution also at the time of exposure to infection must be ranked as a predisposing cause. Urethritis is also due to other causes apart from sexual intercourse, as masturbation, habitual costiveness, inflammation of the prostate gland, certain morbid conditions of the bladder or ureters—particularly the presence of calculi in these parts—piles, the excessive or immoderate use of wine or fermented liquors generally, and the warmer spices, more particularly cayenne pepper. In children this affection is sometimes dependent upon teething or intestinal worms. It also recognises for its cause a gouty or scorbutic diathesis, or succeeds to the suppression of habitual discharges or the cure of old-standing cutaneous eruptions. In addition to all these causes, which are strictly internal, gonorrhœa is produced by external violence or injuries to the penis, and the

---

of virulent pus, which it may retain a longer or shorter period (the question of time not having been settled), which shall produce disease in another person, whilst the tissues upon which the virus has been originally deposited have escaped contagion. These facts are more frequently observed in gonorrhœa than in cases of chancre, although the mode of contagion is essentially the same in each.

[1] "It sometimes becomes a question of considerable interest, and of no little importance in married life, to determine whether leucorrhœal discharges in the female are capable of producing the assemblage of symptoms in the male constituting the ordinary phenomena of gonorrhœa. If questioned on the subject, I should have no hesitation to return an answer in the affirmative, in all cases where the discharge in the female exhibits decidedly [illegible] properties, having myself witnessed several incontrovertible instances of the kind."—Whitehead, 'On Abortion and Sterility, and Morbid Conditions of the Uterus, with reference to Leucorrhœal Affections, &c. &c.'

operation of a second class of causes of various kinds which are external.[1]

Gonorrhœa consists in an inflammation more or less diffused of the mucous membrane of the urethra, &c.[2] Dr Wallace considered this inflammation, from its diffused or erratic character, to be of the erysipelatous kind; hence Desruelles terms it "inflammation érythémateuse." The inflammation does not commonly affect the whole surface of the urethral mucous surface; when it does so, it is generally accompanied with some symptomatic fever. The points in which the inflammation remains most commonly fixed, or in which it is manifested with greatest intensity, are the fossa navicularis, and the vicinity of the bulb: this arises from the anatomical disposition of the mucous membrane, which, in this situation, is much more intimately adherent to the erectile tissue beneath it. Gonorrhœal inflammation may be diffused over a wide surface, and "may involve at the same time the whole of the urethra, the bladder, the testicles, the glans and prepuce, in the male; and in the female, the nymphæ, clitoris, labiæ, vagina, &c.; and thus commencing at the preputial end of the penis, in the fossa navicularis, it not unfrequently creeps slowly on to the posterior parts of the urethra, to the bladder, or to the testicles, while it decreases or ceases entirely in the parts first affected."[3] It may be confined to the mucous membane itself, or extend to the tissues beneath it; in the latter instance, the irritation constantly determines a flow of blood into the cells of the erectile tissue of the corpora cavernosa and corpus spongiosum, which occasions a continual tension of the penis. Occasionally the inflammation becomes located in some part of the canal, producing thickening, effusion into the submucous cellular tissue, and in some rare cases ulceration; in these forms the disease assumes more of a local character, and is not so much disposed to spread by continuity of tissue.

---

[1] I have in several instances seen the introduction of instruments into the bladder produce a disease precisely resembling gonorrhœa, with a swelled testicle. I have seen this after the operation of lithotomy, from the simple introduction of the staff.

[2] Hunter, Sir A. Cooper, and M. Ricord have recorded dissections of patients who have died during the continuance of a gonorrhœa. The urethra was found more or less inflamed, without ulceration or breach of surface; and these appearances were most marked within two inches of the meatus and at the bulb.

[3] Wallace, pp. 237-8.

The first symptom of a gonorrhœa is commonly the glueing together or adhesion of the lips of the meatus, as though a thin film of gum had been placed over them; on tearing this open, a small drop of muco-pus exudes, and the lips are slightly puffy and swollen; as the disease progresses, and the inflammation becomes more acute, more or less pain is felt on micturition, and the discharge increases in quantity, and is almost altogether purulent. When the disease is confined to the fossa navicularis, it is only in this portion of the passage that uneasiness or pain is felt when the patient voids his urine; the glans is more or less swollen, and its lips tumefied and red. On pressing and rolling the urethra between the thumb and finger, a distinct thickening is felt, as though a portion of a sound had been introduced into the urethra; the pressure is also painful to the patient. The greater and more marked the thickening of the urethra in this situation, the stronger is the presumption that the disease is localised there, and does not extend to other portions of the canal. The discharge, under these circumstances, is trifling, though very teasing to the patient; it is constantly presented at the orifice of the urethra. When the inflammation predominates, or is fixed in the straight portion of the urethra, between the glans and the bulb, the patient has no pain in the perineum; but he experiences severe pain in making water, has frequent erections of short duration, and the discharge is more copious than when the disease is confined to the fossa navicularis.

If the disease be located in the bulbous portion of the urethra, the patient has pain in the perineum—increased by pressure—a constant desire to void his urine, with frequent erections of the penis. The discharge is abundant, accompanied with great pain, and the stream of urine is diminished. When the membranous portion of the urethra is chiefly affected, the pain is severe in the perineum and the neighbourhood of the anus; the desire to void the urine is in many cases constant. The prostate and testicles are commonly enlarged and painful, the spermatic vessels congested, as well as the vasa deferentia. Consecutive diseases of the bladder, prostate, and testicles are more frequently to be feared when the gonorrhœa occupies principally the two last-mentioned seats.

During the course of a gonorrhœa, the patient is not unfrequently tormented with pains in the groins, weight and dragging in the testicles, irritation in the rectum, tenesmus, with retention or incontinence of urine. These depend chiefly upon the localisation of the primitive disease, and are easily explained by the anatomical relations of the urethra. Fever of an inflammatory or intermittent character is sometimes present, and affections of the joints, which have been described by some authors under the title of gonorrhœal rheumatism.

Gonorrhœa is not always confined to the organs of generation, or their dependencies: hence varieties in its seat, owing either to the sympathies of other parts during the presence of an urethral gonorrhœa, or from the direct application, from accident or carelessness, of the matter to a healthy mucous surface. These varieties in the seat of gonorrhœa have chiefly been observed in the eye, the nose, and the rectum.

I have seen three several cases where protracted gonorrhœal discharges have been succeeded by purulent discharges from the gums. The matter found round the sockets of the teeth could be pressed up by the patient. In one case, all the teeth were affected, and the gums gradually receded from them, and were red and spongy. I am not able to say on what this condition depended, whether from the accidental application of gonorrhœal matter or not. I am more inclined to the opinion that this is a mere coincidence, and that it is a simple alveolo-dental pyæmia, independent of gonorrhœa, since it frequently occurs where no disease is or has been present. It is not uncommon in patients suffering from constitutional syphilis. The discharge never ceases till the teeth drop out.

The more acute forms of gonorrhœa may terminate in resolution, or chronic discharges simply, a mere supersecretion, without ulceration or breach of surface. To ascertain this, however, when a discharge continues indefinitely, without being materially influenced by remedies, the canal of the urethra in the male, or the vagina in the female, should be carefully examined. The other more ordinary terminations of gonorrhœa are ulcerations of the urethra, stricture, and diseased conditions of the bladder, prostate, or testicles.

Gonorrhœa can hardly be confounded with any other disease, except a primary venereal sore situated in the urethra. From this it is to be distinguished by inoculation, the character of the discharge, which, in the latter instance, is serous, sanious, or bloody, and less in quantity than in the former, and by the presence of a circumscribed induration in some part of the urethra. The lips of the urethra may be everted, and when a sore exists in this situation it can occasionally be seen. In many instances, however, the ulcer is further down the passage, and then the latter mode of examination fails.

In order to understand clearly the principles upon which the treatment of gonorrhœa is to be conducted, it will be necessary to premise that this disease admits of a division into four stages, to each of which a distinct treatment is applicable; and it is owing perhaps to prescribing for the first stage what is only suited to the second, or to the second what should have been employed in the first, that the disease is so often and so long protracted.[1] The first stage of gonorrhœa is characterised by the absence of acute inflammation; there is slight pain or heat in micturition, puffiness and redness of the lips of the meatus urinarius, which are sometimes everted and sometimes stuck so fast together by an adhesive muco-pus, that we have some difficulty in separating them; there is also a slight muco-purulent discharge, and a flattening in the stream of urine. This is the first stage of gonorrhœa; and when these symptoms occur wholly or in part from four to ten days after a suspicious intercourse, we may be pretty sure a gonorrhœa has been contracted, and, if not cut short, will run on quickly to the second or inflammatory stage. It is to the first stage only that the abortive treatment about to be spoken of is limited.

---

[1] Gonorrhœa naturally divides into four forms or stages, which, although they do not all follow each other with perfect regularity, yet when a case is presented to us, it must assume one of the following varieties:

1. The first stage is marked by slight puffiness and adhesion of the lips of the meatus, with slight discharge of an adhesive muco-pus, variable in its duration from two to forty-eight hours. To this stage the abortive treatment is limited.

2. The inflammatory stage, characterised by more or less heat and pain in micturition, swelling and redness of the penis, with purulent discharge. This stage ordinarily continues from seven to twenty-one days; whilst it lasts, a strictly antiphlogistic treatment is to be adopted, and neither injections nor specific remedies used, although there are here one or two exceptions.

3. The stage of discharge without inflammation, or marked complications. In this stage injections and specifics are generally safe and beneficial.

4. In this last stage, known by the name of blennorrhœa or gleet, the general inflammatory symptoms have altogether subsided, and the discharge has diminished to a drop or two in the day. The treatment must be regulated by the pathological conditions of the urethra, and the state of the general health or constitution of the patient.

The treatment calculated to cut short a gonorrhœa in its first stage should not, as a general rule, be resorted to after twenty-four hours from the first invasion of the disease, and is then not in all cases successful. Yet when the protracted character of discharges of this kind is considered, their frequent, various, numerous, and even dangerous complications, and sometimes their disastrous consequences, we cannot but do right to recommend this treatment when the patient applies in proper time, and there is nothing to contra-indicate its employ. An additional reason that this treatment, under such circumstances, should be employed, is the constitution of certain patients: the scrofulous, the rheumatic, the gouty, and those troubled with chronic diseases of the skin, always suffer much gonorrhœa; and if the disease once becomes established, it is sometimes very difficult to cure.

When a patient seeks advice before the inflammatory symptoms of a gonorrhœa are set in, an attempt may be made to extinguish the disease by what has been called abortive treatment; but if there be decided marks of inflammation, or any pain in micturition, or if the disease have existed more than twenty-four hours, this treatment will be attended, to say the least, with risk, if not with injury, and under the most favourable circumstances it will not always succeed. This plan consists in the use of injections, and the administration of smart purges, or large doses of fresh-ground cubebs or copaib When a patient consults me in a state favourable for t employ of the "abortive" treatment, I recommend rest a the lowest possible diet for the succeeding twenty-four hours, with the use of a weak injection of the sulphate of zinc,[1] or diacetate of lead,[2] or nitrate of silver,[3] which is to be used every hour. With this, in the form of medicine, I prescribe a dessert-spoonful of freshly-ground cubebs every three or four hours. This plan very commonly succeeds, if the patient is in a condition for its adoption; and it is perfectly safe, and does not aggravate the succeeding stages, should it not succeed. Nor does it lay the foundation of organic mischief in the urethra. Some surgeons recommend strong mercurial and saline aperients, others large doses of copaiba.[4] The cubebs are safer than large doses of copaiba, and either of these remedies more certain, because their action is more direct, than the treatment by aperients. It is the practice of many to employ one, or even more, injections of strong solution of nitrate of silver in this stage of gonorrhœa, varying in strength from five grains to a scruple, or even more, of the salt to an ounce of water. I have seen the most disastrous consequences from this practice. It certainly occasions severe pain, which is the least evil; very commonly lays the foundation of organic stricture, or pains and discharges from the urethra, which harass the patient for years, or for ever. It frequently fails, prolongs and renders more severe the subsequent stages of the complaint; and its employ has been followed by death.

Case XI.

A student of medicine, previously in good health, contracted a gonorrhœa, for which he used in the early stages a strong solution of the nitrate of silver. An intense urethritis succeeded, with pains in the groins and abdomen; and on the third day of the attack I was sent for to see him. There was great tenderness over the lower part of the abdomen, and a large abscess forming in the right groin. He died within the week from peritonitis, and the abscess in the groin contained more than a pint of matter.[1]

---

[1] ℞ Zinci sulph., gr. iv—viij;
Aquæ dest., ℥viij. M. ft. injectio.

[2] ℞ Plumbi diacet., ℈j—ʒj;
Aquæ dest., ℥viij. M. ft. injectio.

[3] ℞ Argent. nit , gr. ij;
Aquæ dest., ℥viij. M. ft. injectio.

[4] The treatment of gonorrhœa in the commencement by large doses of copaiba, is a dangerous, uncertain, and unsafe practice, more especially if the patient pursue his usual avocations or his accustomed diet during its use.

The first stage of gonorrhœa speedily passes into the second, in which the inflammatory symptoms are more marked, and the discharge altered in character. The penis is red and swollen, the urethra feeling like a cord when rolled between the fingers; micturition is frequent, and attended with severe pain; and the patient is tormented with frequent and involuntary erections of the penis. Under some circumstances, if the inflammation run high, severe symptomatic fever may be present. In the third and fourth stages all these symptoms have subsided, and there only remains slight discharge, with varied pathological conditions of the urethra.

It is of immense importance, from reasons already adduced, that gonorrhœa should be cut short in its commencement, since its duration in many instances is almost indefinite, and its consequences so serious. Patients, in a state of alarm after a suspected connection, frequently seek the advice of their surgeon with the following symptoms: slight irritation in the urethra, dragging of the penis and testicles, uneasiness in voiding the urine, with redness and tumefaction of the lips of the meatus, and a slight increase in the natural secretion of the mucous membrane of the urethra itself. These symptoms do not indicate that a gonorrhœa has been contracted, since an excessive excitement of the organs of generation, without infection, might produce them; but in the positive absence of any means of a differential diagnosis between this and the commencement of actual gonorrhœa, it behoves the patient to be careful. Some are of opinion that many gonorrhœas might be avoided, and the symptoms cut short on the onset, if the patients did not commit errors or excesses in diet at this period, and continue to expose themselves to all kinds of excitement. This opinion is deserving of the more attention, since we commonly see a discharge from the urethra set up and continue for some days after a debauch, and then of itself subside. When the symptoms we have indicated make their appearance, the patient should strictly adopt and adhere to the lowest possible diet, repose as much as possible in the recumbent position, and adopt the treatment already recommended.

---

[1] Mr Henry James Johnson details another fatal case, and a third where the consequences were very disastrous. "On the whole," says he, "this plan is open to grave objections, and I am neither disposed to practise nor to recommend it." (Op. cit., p. 60.)

Vidal (de Cassis) says that he tried nitrate of silver injections for a whole year, and succeeded but in one case. He thinks, and with justice, that we are rarely consulted sufficiently early to attempt abortive treatment with safety or a probability of success. (Op. cit., p. 27.)

The American surgeons generally condemn the abortive treatment by means of strong injections of the nitrate of silver (see Gross's 'Surgery,' vol. ii., p. 977). Mr G. advises very weak injections of the acetates of zinc or lead, or two grains of tannic acid to the ounce of water; or thin mucilage, with a few drops of laudanum, weak green tea, or even tepid water; abstinence from meat, condiments, and fermented liquors, and frequent fomentation of the penis with hot water. These are the principles already inculcated in this book in reference to the abortive treatment. Mr Skey says he cures cases of recent and bad clap in two days with the ferro-citrate of quinine in 12-grain doses, and frequent injections of sulphate of zinc, half a grain to the ounce of rose-water. (?)—Clinical Lecture reported in 'Medical Circular,' Sept. 9, 1857.

Gonorrhœa may be either acute in its commencement, or ushered in with symptoms so mild, and apparently so trivial, as to be termed chronic. The disease also may assume a variety of shades of intensity, varying between these two extremes. Against the first form a pure antiphlogistic treatment should be adopted. Aperients, alkalies, low diet, with local bleeding, by means of leeches, from the perineum, with the warm bath, or fomentations to the penis, and complete repose of the organs affected, constitute the remedies especially applicable to the stages of acute gonorrhœa. At this period the preparations of potass and soda, with diluents, are most serviceable.[1] The gonorrhœal discharge may

---

[1] ℞ Sodæ carbonat., gr. xx;
Sodæ potass. tart., ℥j. M.
Bis terve die sumend. ex aquâ tepidâ; or added to half a bottle of soda water.—Carmichael.

Mr Milton ('On Gonorrhœa,' p. 38,) prefers the preparation of potass to be ushered in with symptoms less acute than those just described; but even under these circumstances, if the patient be plethoric and of full habit, local depletion in the commencement will most materially facilitate our chance of a speedy cure.[1] It is necessary to state that local bleeding, employed for these purposes, is not to be resorted to for the removal of discharge merely; nor without the symptoms of inflammation on some point of the urethra are evident. If employed when the membrane is lax, and no inflammation is present, where the disease is merely a

---

those of soda, and they are certainly very valuable in this stage of the complaint. Mr Milton's forms are the following:

℞ Potass. chlorat., ʒij;
Potass. acetatis, ℥ss;
Liquor. potassæ, ʒiij;
Pulv. rhæi, ℈j—ʒss;
Aquæ dest., ℥viij.
M. ℥j ter die.

The distilled water is to be boiled, and poured on the chlorate of potass, and the other ingredients subsequently added.

Or, ℞ Potass. acetatis, ℥j;
Spirit. ætheris nit., ʒiij;
Mist. camphoræ, ℥vj.
M. ℥j ter die.

Or the following mixture, very valuable in some acute forms of gonorrhœa:

℞ Sodæ carb., ʒss.—ʒj;
Spirit. ætheris nit., ʒiij;
Mucilaginis acaciæ, ℥j;
Tinct. hyoscyami, ʒiij;
Aquæ destillatæ, ℥viss.
M. ℥j 3tis v. 4tis horis.

[1] "Négliger de pratiquer la saignée dans ce cas, c'est laisser échapper l'une des indications les plus pressantes."—Desruelles, p. 421.

To illustrate by a case the use of topical bleeding from a point of the urethra, in that form of gonorrhœa which is termed chronic:—A gentleman consulted me, who had been the subject of a slight discharge from the urethra for five months; he had frequent desire to void his urine, with a constant and troublesome tenesmus; he had tried remedies of all kinds, and injections, during this period, with partial benefit and occasional injury. On examining his urethra, which had not been before done, I discovered tenderness, with thickening of the urethra, in the perineum. Four leeches were applied with great benefit, and by their repetition at intervals, three or four times, he lost his pain, his tenesmus, and the discharge.

blennorrhagia and not an urethritis, we shall prolong the affection instead of cutting it short.

An antiphlogistic treatment, although calculated to facilitate the action of other remedies in the cure of gonorrhœa, is not calculated of itself, at least but rarely, to accomplish this object.[1] Hence another plan of treatment has been framed, which is termed "revulsive." This consists in the employment of remedies which are supposed, by producing a specific action of their own on the lining membrane of the urethra, to supersede that of gonorrhœa: these remedies are principally copaiba, cubebs, turpentine, the preparations of iron, iodine, and cantharides, with injections. Every practitioner must daily witness the uncertainty of the revulsive treatment of gonorrhœa employed alone, and the change from remedy to remedy, with but partial benefit to the patient. In this uncertainty many authors have endeavoured to lay down certain rules at what period the revulsive treatment may be resorted to with the most certain hope of realising its full and curative effects.[2] "When the acute stage has ceased, although the patient may yet continue to be troubled with erections, and although the penis may be heavy and uneasy, and the glans and lips of the meatus still red and slightly swollen, I have recourse to those remedies which are termed 'par excellence' anti-gonorrhœal, which, however, I abandon, to have recourse again to antiphlogistics, if their employment occasion the least increase of inflammation."[3] The use of specific remedies should be limited to the purulent stage of gonorrhœa, when the more acute symptoms of inflammation have been subdued. "When an impression has been made on the inflammatory symptoms, and they cease to advance or remain stationary, the urethra should be injected every morning, and the patient should be placed under the combined influence of the balsam of copaiba and cubebs."[1]

---

[1] Gonorrhœa is sometimes more than an urethritis. Though it would be, as a principle, unsafe to adopt any other than an antiphlogistic treatment in the earlier stages of this complaint, where the inflammatory symptoms run high, yet such a treatment does not always succeed in subduing them. I have known cases where the patient has been confined to bed, lived on nothing but tea and gruel, taken aperients, &c., for a fortnight together, and yet the inflammatory symptoms have hardly yielded at all; whilst under such circumstances, with the cautious use of specific remedies and mild injections, the symptoms have very quickly abated. If the acute symptoms of a gonorrhœa do not yield in ten or twelve days to antiphlogistic treatment, the so-called specific remedies should be cautiously administered.

[2] They should rarely be employed before the tenth day of the disease.

[3] Ricord, pp. 725-6.

The copaiba balsam is one of the most common remedies used in the revulsive treatment of gonorrhœa. Copaiba should never be administered in the early stages of gonorrhœa, nor till the inflammatory symptoms have been subdued by an antiphlogistic treatment and regimen; when the disease continues unchecked by such treatment, it may be employed. It finds its especial application in purulent discharge without inflammation. Here sometimes its benefits are rather delusive than real; it suspends discharge during its administration, but when it is discontinued the discharge soon returns as bad as ever, and this may take place time after time. If such a return of complaint after the discontinuance of copaiba occur two or three times, its use should be abandoned, as it is more likely to protract disease than cure it in such cases. It is over the urethral varieties of gonorrhœa only that copaiba has any influence; it exerts little action on the vaginal or uterine forms of this disease. Many surgeons think it is much more effectual given alone than in a state of combination with other remedies, and recommend it to be given, as the most pleasant way and least likely to disturb the stomach, on the surface of a glass of white wine or lemonade. Its effects are more marked in a state of combination, at least the combination is more beneficial than the balsam taken singly.[2] It may be given by way of enema when the stomach will not bear it; but, when so employed, the dose must be much larger than when given by the mouth. The copaiba has likewise been administered with success in large doses at the very onset of gonorrhœa, however acute, and without any preparatory treatment. Monteggia and Fuller administered from half an ounce to an ounce of the balsam for a dose night and morning, at all periods of the disease.[1] M. Delpech succeeded in curing four hundred cases by administering two drachms and upwards for a dose three times a day; if the inflammation was acute, general bleeding preceded its employ.[2] Rossignol was successful in three hundred cases of gonorrhœas of all kinds. He employed large doses of the medicine uncombined, and did not submit his patients to any preparatory treatment, or any dietetic regimen.[3] The average duration of treatment in these cases was eight days. The method we have just described must be employed with caution; and in most cases where the patient is plethoric it would be well to accompany or precede it with a general bleeding. M. Lallemand, in repeating the experiments of M. Ribes,[4] concludes that, although the large doses of copaiba succeed sometimes in cutting short an acute gonorrhœa, they sometimes augment the inflammatory symptoms and the discharge. I have seen one or two patients in which an incurable incontinence of urine has been brought on by large doses of copaiba. It is a hazardous and dangerous practice to administer large doses of copaiba during the inflammatory stages of gonorrhœa. Although some patients may escape the pernicious consequences of such a proceeding, there are others who suffer more or less severely from it. Even the use of smaller doses of this drug for a length of time, without proper precautions, disposes to consecutive diseases of the bladder and kidneys. I have seen a vast number of cases which bear out this remark. The use of large doses of copaiba, on the onset of disease, should never be sanctioned when inflammatory action has been once set up; and even before this, its administration must be carefully watched. This remark does not so much apply to the use of the piper cubebæ, which is a much more safe remedy in such states.

---

[1] It has lately been very much the practice to condemn the use of specific remedies altogether in the treatment of gonorrhœa. This is something like saying that mercury should be banished altogether from the treatment of syphilis. It is the abuse of the remedy, and not its judicious employment, that does the mischief. I am quite free to admit that great evil is done by the employment of specific remedies at improper times and without proper precautions; but there are certain states and stages of gonorrhœa in which the proper use of specific remedies is certainly to be recommended.

[2] ℞ Bals. copaibæ, ℥ss;
Pulv. cubebæ, ʒvj;
Liq. potassæ, ʒiij;
Pulv. acaciæ, ℥ss;
Aquæ cinnamom., ℥vij. M.

---

[1] 'Bulletin de la Société Médicale d'Emulation,' 1822.

[2] 'Revue Médicale,' t. vii., p. 403.

[3] 'Dictionnaire de Merat et Delens.'

[4] 'Mémoire sur l'Emploi de Baume de Copahu à haute dose dans la Gonorrhée et l'Engorgement consécutif du Testicule.' (Loc. cit., et 'Revue Médicale,' t. ix.) M. Ribes gives from two drachms to an ounce of the balsam for a dose, to cut short a gonorrhœa in the commencement.

The balsam of copaiba may be administered alone in wine or lemonade, as I have said, and this is the best way when it is used in the commencement of the disease. It may also be given in various forms of combination.

The essential oil of copaiba, the resin of copaiba, the balsam inclosed in capsules, the alkaline solution, and a soluble extract, have been employed with the view of getting rid of the unpleasant smell and taste of the balsam: these remedies, however, are none of them entitled to the same confidence as the latter remedy.[1]

---

[1] *Particular Forms for the administration of Copaiba.*

MIXTURES.

℞ Balsam. copaibæ, ℥j;
Mucilaginis gummi acaciæ, ʒij;
Vini Xerici, ℥iv. M. (Val-de-Grâce.)
A fourth part twice a day, or more frequently.

℞ Balsam. copaibæ, ʒvj;
Acid sulph. dil., ʒij;
Mucilaginis acaciæ, ℥j;
Infus. rosæ co. ad ℥viij.
M. ℥j bis terve die.

℞ Balsam. copaibæ, ʒij—ʒvj;
Liq. potassæ, ʒiij;
Pulv. tragacanth. co., ʒij;
Syr. zinzib., ʒvj;
Aquæ destillatæ ad ℥viij.
M. Cochlear. ij. larg. bis terve die.
A little brandy or sherry may be occasionally added with advantage.

℞ Balsam. copaibæ, ʒiij;
Solutionis alkalinæ (Brandish), ʒiss;
Olei limonum, ʒss;
Syr. simplicis, ʒiij;
M. Cochlear j. parv. bis terve die ex aquâ. (Neligan.)

The piper cubebæ may be employed in the revulsive treatment of gonorrhœa, after the same manner as the copaiba. It may be administered in moderately large doses on the onset of an acute affection, with a view of at once cutting it short; when employed, however, under these circumstances, the same rules must be observed as those we laid down for the administration of copaiba. The cubebs may also be given in chronic gonorrhœa, and in gleet, separately, or combined with copaiba, or united with some preparation of iron or alum.[1]

PILLS.

℞ Balsam. copaibæ, ʒv;
Magnesiæ carbonat., ʒiij.

Mix, and stir from time to time till it acquires the consistence of a mass for pills.

When employed as an enema, the dose of the balsam should be from half an ounce to an ounce.*

[1] The piper cubebæ soon loses all its medicinal properties when ground. In order to derive any benefit from it, it should be fresh ground as it is wanted.

Particular Forms for the exhibition of Cubebs.

MIXTURE OF CUBEBS AND COPAIBA.

℞ Bals. copaibæ, ℥ss;
Pulv. pip. cubebæ, ℥j;
Vini Xerici, ℥iij;
Aquæ rosæ, aurantii, vel menthæ, ℥v;
Pulv. acaciæ, q. s.; ft. mist.

Employed with success in gonorrhœa, after the acute stage has passed.

ELECTUARY OF CUBEBS.

℞ Pulv. pip. cubebæ,
Sanguinis draconis,
Pulv. ratanhiæ,
Ext. catechu, āā ʒij;
Bals. copaibæ, q. s.; ft. elect.

Dose.—From two to four drachms in the twenty-four hours, in chronic gonorrhœa or gleet.

℞ Pulv. cubebæ recent., ℥ijss;
Aluminis extractæ, ℥ss. M. bene ft. pulv.
Cap. cochlear. j vel ij bis terve die ex aquâ.

℞ Pulv. pip. cubebæ, ʒj ad ʒij;
Ferri carbonat., ʒss ad ʒj. M. ft. pulv.

These modes of exhibiting cubebs combined with the carbonate of iron

---

* See Velpeau, 'Recherches et Observations sur l'Emploi du Baume de Copahu, et du Poivre Cubèbe, administrée par l'anus contre la Blennorrhagie,—Archives Générales de Médecine,' t. xiii., p. 45.

Many other remedies may be resorted to in the protracted forms of chronic gonorrhœa; these remedies are chiefly the preparations of iron, the turpentines,[1] cantharides,[2] injections, blisters, and medicated bougies, employed alone or in various states of combination. In all instances, however, of chronic discharges from the urethra, this canal should be carefully examined, to determine, if possible, the pathological conditions which keep up or are associated with the discharge; without this we must be at a loss for correct indications, we must prescribe at hazard, and our patient's disease may be prolonged indefinitely. It is often of great service to employ small local bleedings from the perineum at the time we are using astringent or tonic injections, or the remedies alluded to in the present chapter.

Injections are remedies commonly employed in the treatment of gonorrhœa: without care and judgment in their application, they become uncertain and hurtful remedies, sometimes prolonging and aggravating disease, instead of curing it. The following are some indications for their successful employ:—In the early stages of gonorrhœa, as abortive remedies, before the discharge has become purulent, or pain in micturition exists, *i. e.*, as a rule, during the first twenty-four hours. Here they should be used weak, and should be frequently repeated; and in such states the sulphate of zinc and the diacetate of lead are the best. Again, injections are useful and proper when the purulent stage has become chronic, when inflammation has subsided, and the dis-

---

or alum may be employed with advantage after the acute symptoms of a gonorrhœa have subsided.

[1] ℞ Ferri sulphatis, gr. ij;
Terebinthinæ chiæ, gr. v. M. ft. pil. ij.
Ter die sumend.

The tinct. ferri sesquichloridi, the liquor ferri perchloridi, and the liquor ferri pernitratis, are excellent remedies in chronic gonorrhœa, where there is discharge but no inflammation. They may be employed internally, and by way of injection: in the former mode, from 20 to 40 drops two or three times a day in distilled water; in the latter, from 1 to 3 drachms to the half-pint of distilled water.

[2] ℞ Terebinthinæ chiæ, gr. v;
Pulv. cantharidis, gr. ¼. M. ft. pil.
Ter die sumend.

charge continues apparently uninfluenced by internal treatment. In the perfectly chronic stage, sometimes one strong injection answers better than a continuance of weak ones.

Many surgeons object to the use of injections in gonorrhœa, fearing that they frequently occasion stricture, and other morbid conditions of the urethra. I am, however, of opinion that a long-continued irritation or inflammation of the urethra is much more likely to give rise to these evils, and hence it is of consequence to cure a gonorrhœa by the means which will accomplish this object most quickly, at the same time that they do it safely. It is true that injections require great caution in their use, and their injudicious employment is frequently followed by serious consequences. Injections should generally be used from three to six times in the day, and the fluid injected should be made to remain in the urethra a minute or two before it is discharged.[1] In the acute forms of gonorrhœa, injections are inadmissible; they should be employed as soon as this stage is passed, and in cases chronic or indolent from the commencement they may at once be used.

To cut short a gonorrhœa at once, when a patient applies before the acute stage has commenced, injections of the nitrate of silver[2] have been, and still are employed. I recapitulate a few rules which should guide us in the use of injections of the nitrate of silver. They may be used in the abortive treatment of gonorrhœa, under the circumstances already mentioned; when the disease is purulent and sluggish; and in cases where the disease is protracted, and astringents and specifics have failed.

---

[1] The manner of using injections is important, and the patient should be instructed by his surgeon how to inject the urethra, if he do not perform this operation himself. The whole surface supposed to be diseased should be brought into contact with the injection, and for this purpose syringes with a long point or nozzle should be used, or again, a small catheter perforated at the sides may be introduced into the urethra, and the injection poured through it; in other chronic forms of the disease, when the prostatic or membranous portions of the urethra are implicated, a catheter should be passed into the bladder itself, and the injection thrown through it into the bladder; the instrument must be then withdrawn, and the injection poured out through the urethra, the whole urethral surface of which is thus in contact with the injection, as it is forced out by the contraction of the bladder. In chronic cases, where the seat of the complaint is uncertain, this is the most efficacious mode of using injections that I have ever practised.

[2] ℞ Argent. nit., gr. ij—gr. v;
Aquæ destillatæ, ℥viij. M. ft. injectio. Or,

A vast variety of injections have been employed in the various forms of chronic gonorrhœa; those which I have already indicated are most generally successful.[1] When the disease has become perfectly atonic, and all morbid sensibility has disappeared, or when the patient is merely teased with a drop or two of mucous discharge oozing from the urethra once or twice in the day, injections of wine are used extensively both by Ricord and Desruelles, and with much success, alone, or com-

---

℞ Plumbi acetatis, ℈ij;
Aquæ rosæ, ℥vj. M.

This strength is for the male urethra; if used as an injection in vaginal gonorrhœa, &c., the quantity of the acetate of lead may be much increased.

℞ Argent. nitratis, ℈j;
Aquæ destillatæ, Oj. M.

As an injection in chronic urethritis.—

℞ Adipis, ℥j;
Argent. nitratis, ʒj. M.

Of use in the same affection, smeared upon a bougie, and thus passed into the urethra.

Injections should never be used sufficiently strong to cause severe pain in the urethra; mucilage and camphor are advantageously added to prevent this.

[1] ℞ Plumbi diacetat.;
Zinci sulph., āā gr. xv;
Camphoræ, ʒss;
Opii dur., ℈j;
Aquæ bullientis, Oss;
Macerate for an hour, and strain.

℞ Zinci acetatis, gr. xij—ʒj;
Aquæ, ℥viij. M.

℞ Cupri sulphatis vel acetatis, gr. ij—x;
Aquæ, ℥viij. M.

℞ Zinci chloridi, gr. viij;
Aquæ, ℥viij. M.
The strength gradually increased.

bined with tannin.[1] The infusion of galls[2] with alum is also useful, and lately the iodide of iron[3] has been used. In weak solutions the iodide of iron has frequently arrested the gonorrhœal discharge in four or five days, in other instances it has brought on an acute attack of urethritis; but in these instances, when the inflammation has subsided, the patient has been cured of his gonorrhœa. In these instances, the average duration of the treatment has not been more than seven or eight days; in a third series of cases the patients have been unable to bear the irritation which injections of the iodide of iron occasioned, and consequently its employ was given up. The trisnitrate of bismuth has lately been much employed on the decline of the inflammatory symptoms of a gonorrhœa. I have used it extensively with success. It gives no pain, and is in a great measure free from many of the objections which attach to the use of other remedies of this class.[4]

It will often be found of great service to vary the character of the injection, when one appears, from continued use, to have lost its effect: we shall also find that some patients bear one kind of injection better than others; hence I have found persons much benefited by port wine and tannin, who could not bear the weakest solution of the nitrate of silver.

---

[1] ℞ Aquæ rosæ, ℥iv;
Vini rubri, ℥ij. M.

The quantity of wine gradually increased, till at length it may be employed pure. Desruelles adds a sixth or an eighth part of brandy.

℞ Vini rubri, ℥vj;
Tannin, gr. xviij. M.

For the male urethra; for the vagina, the quantity of tannin may be doubled, or still further increased. I have found this injection very valuable.

[2] ℞ Gallæ, ʒj ad ʒij;
Aluminis sulph., ℈ij;
Aquæ ferventis, ℥viij. M. ft. injectio.

[3] ℞ Ferri iodidi, gr. iij;
Aquæ dest., ℥vj. M.

The quantity of the iodide may be gradually increased. Its employ requires caution and watchfulness; solutions of the liq. ferri perchloridi, or liq. ferri pernitratis, are better and safer.

[4] ℞ Bismuthi trisnitratis, ʒj—℥j;
Pulv. tragacanth. co., ʒij;
Aquæ destillatæ, ℥viij. M.

It has been supposed that gonorrhœa is kept up occasionally from the contact of the two sides of the urethra; and hence it was proposed by Fricke to introduce, by means of an elastic gum catheter or bougie, a fine piece of lint into the urethra, and let it remain there, removing it only at each period of making water; the lint may be employed dry, or soaked in any astringent injection. The practice has been followed by occasional success.[1]

Sometimes all our remedies are unsuccessful in checking the discharge; it then becomes necessary to examine carefully the urethra, to discover upon what pathologic condition the continuance of this depends. In cases of morbid sensibility of one portion of the canal only, the solid nitrate of silver has been directly applied to it, by means of the "port caustic" of Lallemand, or any other convenient instrument. When other means have failed, and a running still continues, this practice has been occasionally resorted to: it is liable to grave objections; its effects are very uncertain, though it has sometimes wrought a cure. Chronic urethral discharges which have continued for a long period lose their local character, and become constitutional diseases: it is, in fact, some peculiarity in the constitution that leads them to assume so protracted a form.

Gleet, or Blennorrhœa, are names applied to a class of symptoms which commonly succeed to the more active forms of gonorrhœa.

In true gleet the discharge is said to be transparent, and of a mucous and not purulent character; but it will almost always be found, if the discharge exist in sufficient quantity to be collected on a glass slide, and submitted to microscopic examination, that it contains pus globules. It has also been said that gleets, meaning by this mucous, and not purulent discharges, are not contagious—frequently they are not; but this opinion must be acted on with extreme caution.

The symptoms of gleet are variable. Sometimes the lips of the meatus are merely glued together by an adhesive matter, and no discharge can be perceived; at others a slight oozing of a transparent fluid occasionally takes place daily, or only once in three or four days: again a drop will appear the first thing in the morning, and at no other period; or a spot or two of discharge may follow the flow of the last drops of urine. There are cases where no excitement, either sexual or dietetic, appears to influence these discharges; and there are other cases in which excesses of this kind increase and render it purulent, if it was not so before.

---

[1] See Ricord, op. cit., p. 745, and in the 'Gazette des Hôpitaux;' also Desruelles, op. cit., and Fricke, 'Lettres au Dr Desruelles,' &c.

At times these discharges can only be forced out by squeezing the urethra between the fingers. When they succeed to the flow of the last drops of urine, they are either seminal, prostatic, or vesical, and are forced away by the increased muscular exertion necessary to its expulsion. Gleet is sometimes associated with stricture, and to ascertain its nature the urethra should always be carefully examined before framing a plan of treament for the patient. At times no change can be detected in the urethra, and a bougie of full size passes freely and without pain into the bladder; at other times there is a peculiar soreness or tenderness at one point, generally in the vicinity of the membranous or prostatic portion of the urethra; the passage is occasionally irregular and uneven, and when stricture exists discharge always takes place on withdrawal of the bougie after it has passed through the stricture. Some have placed the seat of gleet in the lacuna magna; no doubt chronic discharges have frequently their seat in the lacunæ of the urethra, and sometimes small hard lumps corresponding to the seat of these lacunæ can be felt externally. Gleet may have its seat also in the spongy or membranous portions of the urethra, or the follicles of the peristole. In all gleety discharges of long continuance, the condition of the urethra behind the scrotum and that of the prostate should be ascertained, since some forms of gleet are frequently dependent on chronic mischief in the latter organ.

In some forms of gleet, although of long continuance, little constitutional or sexual debility is produced, but this is not commonly the case; a certain amount of sexual weakness almost always succeeds to a long-continued gleet, in which the viril power is more or less weakened, or even altogether impaired or destroyed. This is especially the case if the gleet depend on causes situated in the prostatic portion of the urethra, or be complicated with discharges of semen, or the "*liquor prostaticus*,"[1] which is sometimes the case. In lax and irritable systems, where a gonorrhœa becomes implanted on a constitution where the sexual powers have been weakened or rendered irritable by excess, these complications are not uncommon, and in such cases the virility of the patient sustains a fearful shock.

Gleet is the termination of a gonorrhœa, an inflammatory disease, and hence it may happen that the discharge results from chronic inflammatory mischief, localised in some part of the urethra, commonly in one of the lacunæ. Should this be well marked, an abstinence from stimulants, three or four leeches, and a blister, may be of service: unless, however, the inflammatory action be well marked, bleeding must be used with great caution, as it frequently tends to prolong a gleet. Blisters to the perineum in such states, dressed with mercurial ointment till they are healed, succeed better.

If the discharge appear to come from a point of the urethra anterior to the bulb, injections will in most cases be of service; they should be weak and frequently repeated. In addition to those already mentioned, the bichloride of mercury is here perhaps one of the best.[2] If injections are to succeed, the whole mucous surface must be brought into contact with the remedy, and this is perhaps the reason why injections often fail. If the disease be confined to one or more of the lacunæ anterior to the bulb, an injection as commonly practised is useless, for it does not reach the seat of the disease: should they be practised in the ordinary manner, for any complication behind the bulb, they are still more inefficacious. They are good remedies if properly applied. In order to inject the whole urethral surface anterior to the bulb, a small electro-gilt catheter, perforated at the sides in its whole length, and about six inches long, should be passed into the urethra; the point of a syringe, holding about four ounces, should then be applied to its extremity, and the injection gently pressed in through the catheter; the injection passes through the foramina, and comes in contact with all the mucous surface, and acting laterally injects the cavities of the lacunæ themselves; the injection runs out by the sides of the catheter, so that the action can be kept up as long as it may be required.

---

[1] The exact nature of these discharges is at once rendered evident, by submitting them to microscopic examination. In a complication, such as I have just alluded to, we find the peculiar globules of the liquor prostaticus mixed commonly with a few spermatozoa and ordinary pus globules.

[2] ℞ Hydr. bichloridi, gr. j;
Aquæ destillatæ, ℥xij. M. ft. injectio.

I adopt a different plan in affections of the deeper-seated portions of the urethra. I pass a catheter into the bladder itself, and throw the injection through it to the extent of four or six ounces; then withdraw the catheter, let the injection remain a few minutes, and desire the patient to force it out. The bladder should be emptied before the injection is used. In this manner weak solutions of creosote, bichloride of mercury, nitrate of silver, the tincture of the sesquichloride of iron, and other remedies, may be used, with perfect safety and a very great amount of success.

Bougies are valuable remedies in the treatment of many forms of gleet. They may be used simple or smeared with various kinds of ointments,[1] and in many cases succeed where injections fail. They are especially useful if this complaint be combined with stricture, or that uneven condition of the urethra already alluded to, which is so common in many forms of gleety and spermatorrhœal discharges. A bougie is useless if too small, injurious if too large: it should moderately distend the urethra, but not unduly stretch it. A bougie should be suffered to remain in the urethra till some amount of irritation is produced by its presence. It is a good plan to pass the bougie at night, desiring the patient to retain it for an hour or more. In such instances it is well to retain the bougie by a piece of tape; should the patient fall asleep, it might slip down the urethra.

[1] ℞ Argent. nitratis, ʒj;
Unguent. cetacei, ℥j. M.
℞ Ung. hydrargyri fort., ʒj;
Ext. belladonnæ, ʒij. M. (Vidal de Cassis.)

Metallic bougies are preferable to wax or elastic gum in the treatment of gleet.

From the time of Hunter and Benjamin Bell to Mr Milton, blisters have been applied to the perineum and penis for the cure of gleet. I have used them often, with a variable, but certainly at times with a gratifying amount of success. They are useful chiefly when the disease is located in some spots anterior to the bulb. One rarely cures this kind. In the deeper seated forms of disease, blisters to the perineum may be advantageously combined with the bougie and injections.[1]

Internal remedies alone are rarely successful in the cure of gleet. It generally happens that, when the surgeon is consulted first, the patient has been ringing the changes on all kinds of specific remedies. In such cases it is well to abstain for a time from everything of this kind, to regulate the diet according to the constitution of the patient and the peculiarities of the disease, and exhibit a smart mercurial, followed by a saline aperient, repeating the remedy once or twice.

Specific remedies rarely succeed in curing a gleet. Should they be indicated, I generally prescribe them with tonics. Combinations of iron and copaiba are often useful. Sexual intercourse frequently cures gleets that have resisted other remedies; I have known a fit of intoxication cure a gleet; so occasionally will a prolonged abstinence or a course of aperients. In fact, cures have occasionally been due to the most opposite remedies: but these are accidents that are of little or no use to us in practice.

If gleet be dependent on stricture, a surgical operation which divides the stricture may succeed in curing the gleet, and may be adopted, but only after other remedies have failed.

CASE XII.

Profuse muco-purulent gleet, of two years' standing; failure of ordinary treatment; cure by surgical operation.

A gentleman, of weak constitution, consulted me for a profuse discharge from his urethra, which had existed for upwards of a year. It had the appearance of a recent gonorrhœa; the discharge was more purulent than mucous; it was very profuse, to the extent of several teaspoonfuls in the day, and was not contagious. It had resisted all the usual means of cure, under various surgeons and treatments, for upwards of a year. On examining the urethra, a slight contraction was evident in the neighbourhood of the bulb; but a No. 6 bougie passed with great facility. For several months after I was first consulted, the disease remained much in the same state. The patient was willing to submit to anything to get rid of the disgust which his malady occasioned. I at length determined to divide the contracted portion of the urethra, and let the urine flow through the perineum for a time. A grooved staff was passed into the bladder, and the contracted portion of the urethra, with a good part of the membranous portion, divided freely upon it. The urine was suffered to flow through the wound in the perineum for a time, with the view of removing all irritation from the urethra. The former gradually contracted and healed, and at the end of about a month had quite closed. No discharge appeared when the urine again resumed its natural course; the patient has remained in good health since the operation, now four years ago.

---

[1] Other counter-irritants may be used along the under surface of the urethra in cases of simple atonic gleet. Mr Acton recommends the tincture of iodine, and a solution of cantharides in chloroform.—'Lancet,' Oct. 14, 1854.

CHAPTER VI.

OF DISEASES WHICH COMPLICATE OR SUCCEED TO GONORRHŒA IN THE MALE.

The diseases which complicate, and succeed to gonorrhœa in the male, are exceedingly varied and numerous, and very frequently of much more consequence than the original affection, to which, however, they are in most instances strictly due.

Occasionally, when a patient has suffered from gonorrhœa, and when the more prominent features of the disease have altogether subsided, the patient, after micturition, finds that he has not completely emptied the urethra, although he fancied that he had done so; the water comes away in drops, or in a stream, for some minutes or even longer, wetting the linen, and rendering him extremely uncomfortable. This I attribute to an alteration in the natural elasticity of the urethra, for on examination no stricture is to be found. The proper remedy is the bougie; one of large size should be introduced three times a week, and suffered to remain in the urethra for an hour, if no irritation be produced.

Strictures in the urethra are almost always the consequence of protracted gonorrhœal inflammation, seated in one or more points of the urethra, which, ultimately extending to the subjacent tissues, occasions thickening, induration, or vegetation. These are the diseases which, in the expression of Desrulles, an imprudent youth bequeaths to adult age, and which, in certain instances, at more advanced periods, render the patient's life miserable. In the advanced stages of chronic gonorrhœa, recourse should be had to the bougie, which should occasionally be passed, with a view of preventing contraction or thickening of the passage, and promoting the absorption of any submucous deposit, or effusion, that may have taken place.

When a gonorrhœa is seated in the deeper parts of the urethra, in the membranous or prostatic portions, the rectum is sometimes sympathetically affected, and the patient very often suffers from severe pain in the fundament, and a very troublesome tenesmus. This sympathetic irritation is carried in some cases so far, particularly if the patient have used much exercise during the course of his disease, that inflammation is set up in the subcutaneous cellular tissue surrounding the anus, and abscesses form. If circumscribed swelling, with heat and tenderness in the vicinity of the anus, come on during the course of gonorrhœa, the parts should be freely leeched, and the patient subjected to the recumbent position, and perfect quietude. Supposing these means have little or no influence over the circumscribed induration, and the presence of matter be suspected, this should at once be discharged by a very free incision; if a puncture instead of an incision be made, the matter in all probability will not get free vent, may burrow up by the side of the rectum, and a true "fistula in ano" may ultimately ensue. I have seen two or three instances in which such a result has taken place.

If the gonorrhœal discharge is suddenly arrested, either by specific remedies or injections, troublesome symptoms arise, which are due to gonorrhœal inflammation of the prostate gland or the bladder: in the former instance there is pain in the perineum immediately in front of the anus, increased on pressure, sometimes very acute when the perineum is pressed; often there is a sense of trickling in the urethra, as though a drop of urine remained in the passage, with a feeling of weight and swelling in the rectum. On examination per anum, the inflamed gland can be felt swollen and extremely tender to the touch: partial or complete retention of urine may accompany these symptoms; if the bladder participate more or less in this mischief, other symptoms are added; the patient is tormented with a frequent or constant desire to micturate; the urine is voided in small quantities, and its passage is accompanied by an acute, burning pain; and in addition to the pain in the perineum, there is often a tenderness above the pubes; the urine is bloody or purulent, and commonly there is complete retention.

In such states, all specific remedies must be abandoned, especially copaiba, which frequently produces them; leeches should be applied to the perineum, and full doses of opium, with or without calomel, administered; the warm or hip bath should be used once or even twice in the day, and in the intervals warm fomentations or poultices to the perineum; the bowels should be kept free by enemeta of warm water, or the administration of castor oil: but purging should be avoided; it rarely relieves, and frequently aggravates, the patient's symptoms. Rest in bed is imperative, with a broth diet. Relief is also found from the administration of alkalies, especially soda, with hyoscyamus and belladonna.[1]

These symptoms sometimes quickly and spontaneously disappear, should the urethral discharge again make its appearance. The sudden or even gradual arrest of the gonorrhœal discharge is also occasionally followed by complete retention of urine, accompanied by the symptoms just described. I have known complete retention follow the use of a simple injection. I have known it occur after very moderate doses of copaiba, which had suppressed a discharge of many weeks' standing; and I have seen retention in the early stages of gonorrhœa, where none of these remedies had been used.

In cases where the discharge has been suddenly arrested, and retention of urine follows, the bladder rarely recovers its tone till the reappearance of the gonorrhœa, whatever remedies are employed. I have frequently known opiates, bleeding, enemata, the warm bath, iron, and other remedies fail, and the symptoms subside of themselves on the reappearance of a discharge which had been arrested for three weeks. This fact has led to the idea of attempting to restore the urethral discharge, in many diseases which depend on its suppression, by the introduction of bougies smeared with gonorrhœal matter; a fallacy in practice, however plausible in theory. The catheter will of course require to be used once or twice a day, according to the amount and degree of retention, whether partial or complete. When small quantities of urine are frequently voided, the bladder may not be completely emptied, although it may appear to be so. A careful examination should be made of the region of the bladder, from time to time; and if there be a suspicion of the accumulation of urine, the catheter should be employed either to ascertain the fact, or to unload the bladder.

---

[1] ℞ Sodæ carb., ʒj—ʒij;
Mucilaginis acaciæ, ℥j;
Tinct. hyoscyami, ʒiij;
Tinct. belladonnæ, ʒj—ʒjss;
Aquæ dest., ℥vij.
M ℥j 4tis horis.

Although gonorrhœa is not generally followed by secondary symptoms, properly so called,[1] it appears to dispose the economy, either from sympathy, metastasis, or other causes, to several diseases of a very important nature. One of these is gonorrhœal rheumatism, which makes its appearance under two forms; the first seated in the joints, and resembling very much synovitis from other causes; the second confined more to the muscles and aponeuroses, and affecting the fleshy parts, such as the shoulders or hips. In some instances these diseases are owing to a sudden suppression of the gonorrhœal discharge, whilst in others they bear a strict relation to the condition of the local disease, the rheumatic symptoms yielding as the discharge lessens, and returning with increased force when, from any circumstances, the gonorrhœa becomes worse. When these forms of rheumatism complicate gonorrhœa, or appear to be produced by it, the gonorrhœa itself is generally very troublesome to cure. The treatment will depend altogether upon the form under which the rheumatism is manifested. If synovitis be present, it may be necessary to leech the affected joints, whilst the patient takes, in combination with the ordinary specific remedies, colchicum, camphor, or opium.[1] If the disease be owing to a sudden suppression of the discharge, it has been recommended to bring it back by introducing a bougie, smeared with gonorrhœal matter, into the urethra. The warm, but more particularly the vapour bath, is an important adjunct to any internal treatment that may be adopted.[2]

---

[1] Constitutional symptoms sometimes succeed to discharges from the urethra, when the discharge is suddenly suppressed. (See 'Causes of Constitutional Syphilis.') The following case illustrates the affection:

CASE.

A very healthy young man contracted gonorrhœa, which was marked by profuse discharge. He consulted a druggist, who prescribed for him an injection, which he used very freely, and dried up the discharge. Soon after its suppression a bubo formed in the right groin; and its appearance was succeeded by an eruption of red blotches over the whole body, and superficial redness of the fauces. At this period I was consulted: the skin disease was an acute roseola; the redness died away into a marked copper-coloured mottling.

Cazenave says, "This is the form of skin disease (roseola syphilitica) which generally appears when a gonorrhœa has been suddenly suppressed, either by injections or large doses of copaiba." This is commonly called the "copaiba rash."

Pure gonorrhœal ophthalmia may arise—1st, From the direct application of gonorrhœal matter to the eye; 2ndly, From metastasis; and, 3rdly, It has been supposed to be due to sympathetic irritation merely, without either the direct application of gonorrhœal matter or from metastasis. Some writers have denied that the direct application of gonorrhœal matter to the eye of the same individual has power to produce the first form of the disease, and this was the opinion of Dr Vetch. Numerous cases, however, establishing the fact that gonorrhœal matter produces the most destructive form of inflammation of the eye, have fallen under my own notice, and under that of all modern surgeons who have written on the disease. In the second form of the disease, the eye is supposed to suffer from metastasis, analogous to those successive attacks of different parts which are observed in gout or rheumatism.[1] That this form of ophthalmia is not caused, like the preceding, by the direct contact of matter from without, is demonstrated by the fact that it has been observed to occur more than once in the same individual, although every means had been most carefully employed to protect the eyes from contamination.[2]

---

[1] ℞ Hyd. chloridi, gr. j ad gr. ij;
Ext. colchici acetic., gr. j ad gr. iij;
Camphoræ, gr. iij;
Pulv. opii, gr. ss ad gr. j. Ft. pil.
Ter die sumenda.

[2] I have seen some very remarkable and very formidable cases of gonorrhœal rheumatism. One case I especially mention. The patient had suffered from gonorrhœa two or three times, which was always followed by pure articular rheumatism. In the last attack in which I was consulted, the disease had remained six months: he was completely crippled by it. The violence of the rheumatism was always in direct ratio with the abundance of the urethral discharge; the rheumatism had never disappeared in former attacks till the gonorrhœa was cured. Copaiba and cubebs always aggravated the discharge, and made the rheumatism worse. The brothers of this patient had suffered precisely in the same way when they had gonorrhœa; two of them had gonorrhœal ophthalmia occurring without the application of the discharge to the eye.

Mr Lawrence thinks "as much blood should be taken from the arm as will flow from the vein, and that the evacuation should be repeated as soon as the state of the circulation will allow us to get more" (p. 36). Blood must also be taken from the temples by cupping, and by the free application of leeches round the part, until the pain and vascular congestion is relieved. Mr Wardrop goes so far as to say that the only case of gonorrhœal ophthalmia he had seen, in which the eye was saved, was that of a young woman, in whom venesection was repeated as often as blood could be got from the arm. Bleeding alone, however, must not be depended on; but at the very commencement of the disease local applications of an astringent character, hereafter to be mentioned, must be combined with it. Notwithstanding these authorities, "it is stated that the gonorrhœal discharge is suppressed, and that the inflammation of the eye occurs in consequence of that suppression." This view is supported by Richter, Scarpa, and Beer; and they consider the restoration of the discharge from the urethra as a principal indication in the treatment. I have never seen a well-marked case of this kind, though there are many on record. I have seen the most acute ophthalmia associated with profuse discharge from the urethra. Swediaur has collected a few cases, in which the return of discharge from the urethra cured an ophthalmia which had arisen from its sudden suppression, and which had resisted the usual modes of treatment. The third form of gonorrhœal inflammation of the eye is that which occurs during the continuance of a clap, without the direct application of the matter, or without the suppression of the discharge. "Since, then, gonorrhœal ophthalmia may occur whilst the discharge from the urethra continues, and since it does not always take place when that discharge is stopped, we cannot admit that the affection of the eyes owes its origin to the cessation of disease in the urethra."

---

[1] Lawrence, on the Venereal Diseases of the Eye, p. 34.

[2] Wallace, op. cit. There can be no doubt of the correctness of this opinion. Mr France ('Lancet,' March 3, 1855) gives several cases of gonorrhœal ophthalmia which were successfully treated by local depletion, cupping the temples, and leeches to the inner surface of the eyelids; calomel, opium, and tartar emetic; with nitrate of silver lotion, four or six grains to the ounce, and poppy decoction with alum. It is remarkable that in many of these cases the causes are not stated—that is, the disease was said to arise soon after a clap had been contracted, but it is not stated whether any direct infection had taken place, in the majority of cases, and in one it is distinctly said the patient was not aware of having conveyed any discharge to the eye.

I am disposed to think that bleeding has been too exclusively relied upon in this disease, which is, in its commencement, purely local; and Mr Lawrence himself is dissatisfied with the results of the cases treated exclusively on this plan, although he attributes its want of success to its not having been employed to a sufficient extent. However, he mentions a case (Case 5), in which blood was taken very largely, both locally and generally, and other powerful antiphlogistic means were resorted to, yet the eye was lost. Mackenzie says, "bleeding alone must not be depended on;" and O'Halloran is of opinion that, if an inquiry were instituted amongst army surgeons, it would be found that those who had used the greatest depletion were the least successful practitioners.

Directly after the system has been depressed by loss of blood, we must have recourse to local, astringent, or specific remedies. Amongst these may be mentioned, as entitled to most confidence, the solution or pomade of nitrate of silver. The former may be employed in the proportion of ten grains to the ounce of water, dropped into the eye at the very commencement of the disease. O'Halloran "had become dissatisfied with the antiphlogistic treatment, from having found it frequently insufficient. I was hence led to use astringents, not only in the early stage of the disease, but when the purulent discharge and chemosis were fully established. He employed the sulphate of copper in substance, rubbing with it the inner surface of the eyelids after everting them, or he dropped into the eye the ten-grain solution of the nitrate of silver."[1] Mr Lawrence mentions two cases where this treatment was successful. Most modern authors are agreed upon this plan of treatment, and use as astringents a solution of the nitrate of silver, of the sulphate of copper, or a pomade of the first-named salt. I have seen one case in which a solution of the sulphate of copper was completely successful, when the nitrate of silver in the same form appeared to do little good. In the intervals of the dressings the eye is to be covered with a compress soaked in the liquor aluminis compositus diluted.[2] The extract of belladonna may be rubbed over the temples, and round the orbit, during the treatment, with a view of preventing any adhesions of the iris, which commonly becomes affected, as well as the other deeper seated structures of the eye. If the chemosis be great, Ricord recommends a portion of it to be removed with a pair of scissors; a practice of which Dr Mackenzie speaks also in very high terms.[3]

It is perfectly useless, not to say criminal, in such cases, to waste the time, so precious to our patient, in administering the remedies looked upon as specific in gonorrhœa, such as copaiba and cubebs, recommended by Dr Wallace. "The anti-gonorrhœal remedies, properly so called, have absolutely no action upon the disease, whatever be their mode of administration." The testimony of modern experience is against the use of mercury in the acute forms of this disease; we lose time, and compromise the vision of the patient, by relying upon it in this stage; in the chronic forms it may be employed with a reasonable prospect of success.

Those authors who support the view of gonorrhœal ophthalmia being produced by metastasis place great stress upon the restoration of the urethral discharge; it is also recommended in cases where this ceases during an attack of disease of this character. Swediaur, Richter, Beer, and Scarpa recommend the introduction of a bougie smeared with the discharge from the eye, or with gonorrhœal matter taken from another patient. In spite of the authorities of these names, I think their advice rather the result of preconceived theoretical notions than the deductions from the results of treatment.[1] Mr Lawrence supports the latter opinion, and the modern writers of greatest experience agree with him. "If," says Ricord, "the discharge from the urethra is for a short time diminished during an attack of gonorrhœal ophthalmia, it is never completely suppressed, and we can affirm, in spite of contrary opinions, that not the least benefit is to be expected from attempting to increase or restore it." (P. 763.) Swediaur appears to have been successful in some chronic cases of this character by the restoration of the urethral discharge; but I cannot find in any late writer, neither have I ever seen, a case supporting the efficacy of this treatment.

---

[1] Lawrence, p. 44.

[2] ℞ Aluminis extr., gr. iv.
Aquæ rosæ, ℥j. M. ft. lotio.

To be injected frequently between the lids, especially in young children.

[3] I have done this in several instances with partial success: the patient requires to be placed under chloroform.

Many modern surgeons admit a true gonorrhœal inflammation of the iris. This generally occurs in scrofulous patients labouring under gonorrhœa or gleet. Sometimes it succeeds to gonorrhœal inflammation of the conjunctiva or the sclerotic, or occurs with that peculiar species of rheumatism which sometimes accompanies a gonorrhœa. It very commonly alternates with affections of the joints, and an acute attack of synovitis frequently cures or very much relieves the inflammation of the eyes. The frequency with which this species of disease succeeds to mild gonorrhœal ophthalmia, and the facility with which adhesions of the iris take place, render it necessary that in the various forms of gonorrhœal ophthalmia we should adopt the plan of keeping the pupil dilated by the external application of belladonna. "This affection of the eye is exactly the same as rheumatic inflammation of the sclerotic and iris occurring independently of gonorrhœa. Both this and the mild purulent inflammation of the conjunctiva are to be regarded as rheumatic affections of the organ excited by gonorrhœa; that is, they take place in individuals in whom this constitutional disposition is shown by inflammation affecting either the synovial membranes or the fibrous structures of several joints."[1] Dr Vetch has given cases of this disease. In one instance the gonorrhœa was well marked and violent, and was succeeded by a swelled testicle; rheumatic inflammation of the joints and of the external proper tunic of the eye followed. They terminated in an irregular and contracted pupil, some opacity of the capsule of the lens, adhesions between it and the iris, and a considerable loss of vision. Generally, however, the prognosis is favourable, and the disease very much more under the control of art than the more acute forms of purulent ophthalmia. "The gonorrhœal is generally more rapid in its progress than any of the other varieties of iritis, and is one of the most severe and formidable whilst it lasts; but it yields more promptly to decided treatment than any of the rest, and affords examples of perfect recovery even when the aqueous chambers are filled with lymph."[2]

---

[1] I have before shown the fallacy of this doctrine.

The treatment must consist, in the onset, of general and local bleeding, suited to the urgency of the symptoms; calomel and opium, so as rapidly to affect the system; and the application of the extract of belladonna. Our chief reliance is to be placed upon mercury united with opium and antimony; and if there exist a rheumatic state of the system, colchicum and turpentine will be useful. Sir B. Brodie places great reliance on colchicum. As local applications, warm decoctions of poppy are generally agreeable to the patient's feelings, on account of the great pain that sometimes attends the disease. "When the inflammation is checked, blisters may be advantageously employed, and the cure may be completed by Plummer's pill, with mild aperients and regulated diet."

One of the most frequent diseases which succeeds to or complicates a gonorrhœa is an inflamed testicle, known also by the name of epididymitis (from the constant pathological changes found in this part), orchitis, and hernia humoralis. It is not often that an opportunity is afforded of seeing the changes which take place in the testis, or its envelopes, in consecutive gonorrhœal inflammation; nevertheless, dissections of testes which have been the seat of such diseases have been recorded by M. Gaussail,[1] Mr Curling,[2] Sir B. Brodie,[3] and Sir A. Cooper.[4] The epididymis, in such instances, is enlarged to twice or thrice its natural size, this enlargement being produced by the effusion of a brownish deposit between the convolutions of the duct. The indurations felt on handling the epididymis are generally the result of adhesions only, and not due to an effusion into the interior of the duct. This, I think, is proved by the fact, that the viril power is not impaired generally after ordinary attacks of gonorrhœal orchitis. The coats of the vas deferens are thickened and injected, and an albuminous deposit is found in the cellular tissue around the tortuous part of the vas deferens and tail of the epididymis. Marks of inflammation are also found in the tunica vaginalis, consisting of effusions of lymph and bloody serum, loose adhesions, and general vascularity of the membrane. It is owing to the extension of inflammation to the tunica vaginalis that are due the intense pain and tenderness which accompany consecutive orchitis. The body or glandular structure of the testis is frequently affected; and in instances where testes which have been previously the seat of consecutive gonorrhœal examination have been examined, the tubular or proper secreting structure has been more or less disorganised: in the cases dissected by Sir B. Brodie and Sir A. Cooper, one-third of the tubules had become converted into a white fibrous substance, and " were rather chords than tubes." On handling testes which have been the seat of consecutive orchitis, although little change appears in the body of the gland itself, the epididymis is always found enlarged to a greater or less degree, and I believe this condition seldom entirely disappears.

---

[1] Lawrence, p. 57.

[2] Mackenzie, p. 476.

The disease generally commences in the epididymis, which forms a hard, tender lump at the bottom or side of the testis; the inflammation spreads to the substance of the gland and to its envelopes in acute cases; hence the severe pain from distension of the tunica albuginea. The tunica vaginalis is also sometimes affected, and fills with fluid, as in hydrocele; the inflammation runs along the vas deferens and the spermatic chord. The duct feels like a wire in the chord; and sympathetic pains extend to the groin, the back and loins, and across the pubes. The whole of the epididymis and spermatic chord are sometimes very hard; and when this part alone is affected, the epididymis may be traced distinctly apart from the testicle all down the side and back of it, whilst the gland itself is quite free from swelling, or even tenderness.

---

[1] 'Mémoire sur l'Orchite Blennorrhagique,—Archives Générales de Médecine,' Jan., xxvii., p. 210.

[2] 'On Diseases of the Testes,' p. 254, &c.

[3] 'London Medical Gazette,' vol. iii., p. 219.

[4] 'The Anatomy and Diseases of the Testes,' p. 80.

This disease hardly ever occurs during the first,[1] or even in the second week of a gonorrhœa, more commonly in the third.[2] The disease has been supposed to originate from the direct propagation of inflammation from the ejaculatory ducts to the vesiculæ seminales, and through the vas deferens to the epididymis. Cullerier believes that it is owing to the direct propagation of disease along the seminal passages, and not to metastasis. The longer the continuance of a gonorrhœa, the more likely it is to be thus complicated; the best way to prevent it is to cure the disease as quickly as possible.[3] Amongst other causes are exercise, constipation, the neglect of the suspender, free living, and the use of stimuli during the course of a gonorrhœa. Amongst the predisposing causes of this affection may be enumerated fatigue, violent exercise, repeated sexual intercourse, and any circumstance producing excitement of the organs of generation. Various occupations predispose to it, as those of weavers, turners, grooms, and all trades where the testes are exposed to frequent friction. "A flaccid state of the scrotum is also to be ranked amongst the predisposing causes: a strong cremaster and firm scrotum are rarely met with in individuals suffering from swelled testicle."

It is generally believed that the discharge of a gonorrhœa is diminished, or disappears altogether, when the testicle becomes inflamed: this, though most commonly the case, is by no means a constant occurrence. Hunter a long time ago remarked, that there were cases in which the discharge rather increased than diminished when the testicle became inflamed. In the cases analysed by M. Gaussail and M. d'Espine,[1] the discharge was generally lessened when orchitis supervened, although in many of the cases it underwent no change, and in some was increased. A patient is never free from the risk of a swelled testicle as long as a gonorrhœal discharge remains; I have known it occur where disease had existed six months.

---

[1] Not once in three hundred times. (Ricord.)

[2] I have seen it in the third month, and even later.

[3] In many instances where gonorrhœas have continued for any length of time, first one testes inflames, and then the other; these attacks last for three or four days, and then subside; there is always a tendency to the secondary affection as long as the mischief in the urethra continues.

A swelled testicle may be caused by the use of injections, or the quick suppression of the discharge, but, much more frequently, by the extension of the inflammation in the manner already named.[2] The tables of M. Gaussail show that swelled testicle is much more frequent in the fourth and fifth weeks of the disease; hence the quicker the primary affection is cured, the less chance there is of consecutive inflammation of the epididymis and affections of the testicles.

The judicious use of specific remedies certainly does not, with common prudence and in ordinary cases, produce an inflamed testicle. More risk of this is seen by suffering the discharge to continue week after week, than by the employment of specific remedies and injections, after the tenth or twelfth day.[3]

It is not improbable that in certain positions of the testes, and where an irreducible scrotal hernia is present, a swelled testicle may be mistaken for a strangulated hernia. I attended a gentleman for gonorrhœa who had an irreducible scrotal hernia of the right side. In the third week of the disease, after a long walk, he became affected with swelled testicle on the ruptured side; this was accompanied by constipation, vomiting, tenderness of the abdomen, and other symptoms common to strangulation of the bowel; for two days the case had a very formidable aspect. Mr Acton[1] has recorded a curious and instructive case bearing upon this subject. "A young man, 24 years of age, was in the habit of amusing himself, when a boy, by pushing his testicles into the abdomen. Two months previous to his admission into the hospital, he contracted a gonorrhœa which discharged profusely; he continued, notwithstanding, his employment. In about a fortnight after, he felt a painful sensation in the left groin; and this becoming worse, he entered the hospital a month after the commencement of his complaint, suffering under great pain in the inguinal region, which was greatly inflamed, whilst pressure on that part produced that peculiar feeling, but in a greater degree, which is excited when the testicle itself is compressed. On examining this patient, no testis was found on the left side of the scrotum, but, on passing the finger into the left inguinal canal, a rounded body was distinctly felt, resembling the testis in shape, and the patient stated that when this body was handled he experienced a similar pain to that felt when the testicle on the opposite side was squeezed."

---

[1] 'Mémoire Analytique sur l'Orchite Blennorrhagique,—Mémoires de la Société Médicale d'Observation,' tom. i., p. 494.

[2] The use of injections, in many irritable subjects, clearly disposes the patients to an attack of swelled testicle; there can be no doubt that this is frequently the case, since we find that the introduction of a sound or catheter, where there is no urethritis, will frequently produce the same effect.

[3] In many cases, however, if the patient be not careful, or if he indulge in stimuli or take much exercise, especially dancing or skating, whilst taking specific remedies, a swelled testicle may be produced. Copaiba does this more than cubebs. There are cases where an inflamed testicle appears to be benefited by specific remedies; but their use during the course of an orchitis is not generally to be recommended.

This case was recognised as one of ordinary swelled testicle, notwithstanding the unnatural position of the organ. It is not improbable that such a case might be mistaken for strangulated inguinal hernia, more particularly when such symptoms as vomiting, constipation, and tenderness of the abdomen are present. The history of the concomitant affection, and the absence of the testes in the scrotum, are the chief points which should decide the surgeon. Should such a case coexist with a strangulated hernia, it would form a curious and puzzling complication, and one which would render an operation extremely embarrassing.[2]

---

[1] On Venereal Diseases, p. 95.

[2] A. L—, æt. 32, was admitted into the Queen's Hospital with gonorrhœa; he had a large painful tumour in the inguinal canal, and only one testicle in the scrotum. This was a case of orchitis, the testicle being fixed in the inguinal canal.

A boy, æt. 14, was admitted into the Queen's Hospital, having a tumour

If gonorrhœal epididymitis occur with any degree of intensity, the disease soon involves the neighbouring tissues of the testicle; and hence we observe speedily succeeding to it, or complicating it, diseases of the tunica vaginalis or testicle itself, and very commonly hydrocele, œdema, erysipelas, phlegmon of the scrotum, or even suppuration of the testicle.

The treatment of gonorrhœal inflammation of the testicle and its envelopes must be at first antiphlogistic. The patient should rest in bed if possible, and be put on the use of calomel, opium, and tartar emetic; the testicle should be fomented with hot water or hot poppy decoction, or covered with a bread poultice into which has been put one or two teaspoonfuls of liquor plumbi. If the disease be very acute and painful, the application of leeches on the scrotum or the track of the spermatic chord may be necessary; or a vein in the scrotum may be opened with a lancet, and the flow of blood encouraged by warm applications. The bowels must be kept free by castor oil or saline aperients, but active cathartics are unnecessary. In addition to the local remedies I have alluded to, lotions of various kinds are useful, especially if the parts are too sensitive to bear the weight of a poultice. Those containing lead[1] or the hydrochlorate of ammonia[2] are the best; they should be warmed before applying. Ice has been recommended; there are many

---

in the right inguinal canal, hard, tender, and inflamed; it was clearly an undescended testicle, there being but one gland in the scrotum.

A gentleman, æt. 23, consulted me respecting some functional sexual disorder. He had one well developed-testicle in the scrotum. About the situation of the internal abdominal ring, a large hard body could be felt. This, when pressed upon with the finger, occasioned exactly the same sensation as when the other testis was gently compressed. When he became excited, or during erection of the penis, he experienced a considerable amount of uneasiness in the same spot. The testis was in the abdomen; it had not entered the inguinal canal.

[1] ℞ Liq. plumbi diacet., ʒiij;
Acet. destillatæ,
Sp. vini rect., āā ℥j;
Aquæ rosæ, ℥vj. M. ft. lotio.

[2] ℞ Ammoniæ hydrochlorat., ʒj;
Acet. destillatæ, ℥j;
Aquæ, ℥vij. M. ft. lotio.

inconveniences attending it. The plan I have just laid down is safer, and generally more efficacious. To relieve the pain consequent upon inflammation of the body of the testicle, which is produced by the unyielding nature of the tunica albuginea, Vidal recommended a slight incision to be made into or through this covering. He speaks of it as innocuous, and giving speedy relief after the failure of other remedies, having practised it in many hundred cases. I never saw a case which required this treatment, though it is possible there are some in which it might find its application ; I therefore mention it here.

When the acute symptoms have in some measure subsided, a very efficacious process is compression of the testicle by strapping. This practice has succeeded in curing many forms of epididymitis in five or six days, and has the advantage of not confining the patient. I have occasionally employed it from the very commencement of the disease with complete success : in such instances it must be associated with an antiphlogistic treatment, such as low diet and the use of the tartar emetic with opium.[1]

The plaster is to be cut into thin straps, and applied in a

---

[1] The emplastrum "de Vigo" is generally employed for this purpose in the French Venereal Hospitals ; it resembles much, though is in some some respects superior to, the Emp. ammoniaci cum hydrargyro of the London Pharmacopœia. The form is as follows :

℞ Hydrargyri, 95 parts ;
Styracis liquidæ, 48 parts.

These are to be rubbed together till the globules of mercury disappear ; then melted together in a separate metal pot,—

Emp. plumbi,	312 parts ;
Ceræ flavæ,	16 "
Terebinthinæ puræ,	16 "
Picis Burgund.,	16 "
Gum. ammoniaci,	10 "
Olibani,	5 "
Myrrhæ,	5 "
Croci in pulv.,	3 "

These ingredients are to be well mixed—first among themselves, and then with the mercury and styrax. The plaster thus made is to be spread upon linen, calico, or thin leather, and then cut into strips of convenient thickness.

circular manner round the testicle, drawing this organ, as far as can be done without pain, to the bottom of the scrotum, and taking care not to pucker the skin in applying the plaster.[1] The first strap is placed circularly round the testicle at the insertion of the chord, compressing the organ as much as the patient can bear; a succession of straps are then applied till the organ is covered: and a second series of straps then placed over the circular ones from below upwards, and over these again a few more circular ones to keep the whole in place. If the pressure of the plaster occasions pain or irritation, the straps are to be removed till the inflammation or sensibility is diminished; in many instances the patients experience relief directly the testicle is supported by the plaster. In spite of the sneers of a modern writer, strapping the testis is a very valuable remedy in consecutive gonorrhœal orchitis. I have tried it in syphilitic sarcocele, and other chronic diseases of the testis, without benefit. As a general rule, it should not be employed till the more acute symptoms have somewhat yielded. The size of the testis rapidly diminishes under it, so that the straps want reapplying at the end of about the third day.[2]

A chronic enlargement of the testis, sometimes occurring alone, and sometimes complicated with hydrocele, occasionally remains after the subsidence of the more acute symptoms accompanying a swelled testicle. For this affection compression is of little use. I believe the proper remedy to be the hydriodate of potass, with alterative doses of mercury, and the external application of tincture of iodine, or the iodide of lead ointment. Mercury pushed to salivation is occasionally of great service in these consecutive diseases of the testicle and its envelopes.

---

[1] The best plaster for strapping the testis is composed of soap, belladonna, mercurial, and lead plasters, in about equal proportions, carefully spread on thin firm leather, and then cut into thin straps. The mercurial plaster alone sometimes irritates the scrotum.

[2] It must not be supposed that strapping or compression of the testicles is free from inconvenience: it is not so. I have had an extended experience in its use. It occasionally increases pain, even when employed after the acute symptoms have subsided. When it succeeds, the testicle shrinks rapidly in size, the straps requiring removing and renewing on the second or third day; this is attended with great annoyance, from the straps sticking to the hairs of the scrotum. I now never use plaster for strapping the scrotum after the acute symptoms of orchitis have subsided. I spread the compound recommended above on fine soft lint, and place it in strips over the scrotum; there is no pain on application, and no difficulty in removal. A little olive oil or glycerine may be added, if the plaster is too hard.

In some constitutions gonorrhœa leaves behind it a general weakness and irritability of the organs of generation, and an alteration in the character of their secretions. The semen is scanty and devoid of its characteristic smell; it is thin and watery, and ejected languidly during coition; very quickly, and without sensation. When the bowels are evacuated, there is occasionally forced from the urethra a thin substance like gum, which has a soapy feeling when rubbed between the fingers. This is, no doubt, a vitiated hyper-secretion which hangs about the relaxed mucous membrane of the urethra, the lacunæ, and the ejaculatory ducts, and which is forced from the urethra by the action of defecation.[1] At the same time, the penis and scrotum are flaccid, and the reflex actions of the erector and ejaculatory muscles are with difficulty excited. With these symptoms there commonly exists weakness and trembling of the legs, and a general lassitude of the whole system.

The balsams and turpentines, with the preparations of steel, and cantharides, are very useful in such states as general remedies. Tonic and stimulating injections should also be practised with a syringe perforated on the sides so as to inject the lacunæ of the urethra, or follicles of the prostate, which are commonly the principal seats of disease. Pain, heat, and various forms of irritation sometimes affect the penis after an attack of gonorrhœa. Many of these symptoms are disordered sensations merely. They may or may not be associated with the various forms of discharge already alluded to; or they may again be indicative of some pathological change in the urethra, such as stricture, upon the earlier stages of which they are occasionally dependent. In all cases, before forming a plan of treatment, the passage should be carefully examined by the bougie, which is, in such cases, very commonly the most efficient remedy in their cure. Great caution, however, is necessary in the employment of bougies in an irritable urethra. I have been consulted by several unfortunate patients who have suffered from these neuralgic conditions of the urethra, who have wandered from surgeon to surgeon; and where the too frequent and perhaps injudicious use of instruments has terminated in perineal abscess, in chronic orchitis, or irritable testis.

---

[1] This fluid, though chiefly composed of vesical or prostatic mucus, sometimes, but not always, contains spermatozoa. I have examined it in a great number of cases. It is occasionally altogether composed of peculiar corpuscles, with which at times a few spermatozoa are mixed. The remedies are injections, practised through a catheter passed down to the prostatic portion of the urethra.

Many writers have alluded to gonorrhœa of the rectum, a disease happily rare in this country at least. I have seen but one well-marked case, in which the cause and nature of the disease were frankly admitted by the patient. The first symptoms were those of acute inflammation; the anus was swollen, red, exceedingly tender and painful, and the seat of a profuse purulent discharge; the symptoms were sufficiently severe to confine the patient to bed for several weeks. They were slowly subdued under rest, a low diet, leeches, fomentations, and weak astringent injections. I have seen this patient, at intervals, for seven years, and even now much irritation remains, with occasional discharges of pus; the fæces also occasionally being more or less covered with purulent matter. On examination with the speculum, the mucous membrane of the rectum appeared vividly and generally red, but no ulceration was present. In cases like the present an antiphlogistic treatment appears the only one applicable, combined with injections of cold water, or weak solutions of the sulphate of zinc, the acetate of lead, or nitrate of silver; these should be thrown up in large quantities by a common enema syringe. Specific remedies are useless; it is a singular fact that it is only over the urethral form of gonorrhœa that the so-called specific remedies appear to exert any influence.

CHAPTER VII.

OF GONORRHŒA IN THE FEMALE.

GONORRHŒA in the female is for the most part a disease of very different character to that in the male; the anatomical structure and functions of the organs implicated modifying the affection both in its seat, its course, its treatment, and its terminations.

This disease recognises for its pathology, acute or chronic inflammation of the vulva, vagina, canal of the cervix uteri, or urethra. Pathologists have as yet failed in establishing any differential diagnosis between a specific and an ordinary inflammation of the parts mentioned. "It is a singular pathological fact, that although the existence of a specific and contagious form of vaginitis is generally admitted, yet it is difficult, if not impossible, to point out any decided characteristic by which it may be distinguished from ordinary vaginitis. Like all those who have preceded me, I am unable to indicate satisfactorily any absolute means of distinguishing between simple inflammation of the vagina and gonorrhœal inflammation, though I believe the difference does exist."[1] In the female, gonorrhœa is not confined to the urethra; it is seated in the mucous membrane reflected over the neck and mouth of the uterus, in the vulva, or the vagina and its follicles, and the vulvo-vaginal gland.[2]

The chief varieties of discharges in the female are:—

Urethral gonorrhœa, the type and model of gonorrhœa or blennorrhagia properly so called; eminently contagious.

Vaginal discharges, termed gonorrhœal or blennorrhagic, much more common than the preceding, particularly in females of loose character, the precise nature of which it is often very difficult to determine; nevertheless the vagina may be the seat of gonorrhœa, either alone or complicated with uterine or urethral gonorrhœa.[1]

---

[1] 'A Practical Treatise on Inflammation of the Uterus, its Cervix and Appendages, &c., by James Henry Bennet, M.D.,' 3rd edit., p. 218.

[2] Huguier, 'Mémoires de l'Academie de Médecine,' vol. xiv.—J. H. Bennet, op. cit., p. 213.

Uterine gonorrhœa, or blennorrhagia, capable of producing disease in the male. The uterine discharge continues long after the other forms have been cured, and is contagious, although it resembles mere leucorrhœa.[2]

The ordinary pathological changes found in females who are known to have produced gonorrhœa in the male, are found in the labia, in the vulva, the vagina, the meatus urinarius, and the canal of the neck of the uterus, more rarely in the uterus itself, and in the ovaries. The labia majora are generally more or less swollen; on inverting them, their internal or mucous surface is red and inflamed, uniformly, or in patches; or again it has an aphthous, patchy appearance, especially in old cases: this surface is sometimes studded with warts, and occasionally the whole labia are converted into a condylomatous mass, which runs backwards along the perineum to the margin of the anus, which is surrounded by similar growths. Sometimes a similar condition of the mons veneris exists, but this is comparatively rare. If the seat of the complaint affect the vulva, the labia minora are also red and swollen, and the entrance to the vagina contracted, red, and intensely tender in acute cases; between the folds of the labia, a white sticky secretion is found, like that under the prepuce in balanitis in the male. The irritation, itching, and pain are intolerable in gonorrhœa, where the vulva is especially affected, particularly in cases where a newly-married female, previously healthy, has been diseased by the husband, who has married with an uncured blennorrhœa, a circumstance not very uncommon.

---

[1] See the chapter 'On Syphilis of the Uterus,' for a further account of the varieties of vaginal and uterine discharges.

[2] See Tyler Smith 'On Leucorrhœa,' chap. vii., 'On the Relations of Leucorrhœa to Gonorrhœa in the Female, and Urethritis in the Male.'

The discharges from the female which produce various forms of disease in the male, such as urethritis, gonorrhœa, balanitis, and superficial ulcerations of the penis, are due to one of three causes: these are leucorrhœa, gonorrhœa, or constitutional syphilis. The latter may be suspected when the patient has exhibited for a longer or shorter period a well-marked constitutional taint. The effects produced by such discharges are—

1. Balanitis, occurring constantly after intercourse with certain females so affected.

2. Urethritis, subsiding after a few days without any specific treatment.

3. Urethritis, running the ordinary course of gonorrhœa.

4. Ulcerations, which are more or less superficial, rarely indurated, or requiring any specific treatment for their cure.

When the vagina is affected in gonorrhœa, it is contracted, red, and painful, and the rugæ red and elevated; the inflammation rarely affects the whole vaginal surface at once, that part under the arch of the pubis being most frequently the seat of disease. In acute gonorrhœal inflammation of the vagina, the speculum should not be used till the more acute symptoms have subsided.

The labia and os uteri are very frequently the seat of gonorrhœa. Gonorrhœal inflammation of the vaginal surface of the uterus is very commonly combined with affections of the vagina, and hence these forms have commonly been described as utero-vaginal. In some cases the canal of the neck only is affected, without participation of the vaginal portion of the uterus; and these are the cases in which some Continental practitioners have proposed injections into the uterine cavity itself. When we consider the elaborate organisation of the mucous membrane lining the canal of the cervix, as revealed by the dissections and microscopical examinations of Dr. Tyler Smith,[1] we must be quite aware that a local treatment is essential in this form of disease.

The urethral form of gonorrhœa in the female is rarely met with alone; it sometimes complicates the other forms. In addition to the pathological conditions just mentioned, abscesses occasionally form in the vagina and perineum; and a gland in the groin may inflame and suppurate, constituting the so-called sympathetic bubo.

In the more acute forms of the disease, a strictly antiphlogistic treatment and regimen must be adopted: aperients, the warm bath, emollient fomentations and poultices, and injections, or rather continual irrigations of the parts, by means of a self-acting syringe, with sedative, demulcent, or slightly astringent fluids.

---

[1] Medico-Chirurgical Transactions, vol. xxxv.

In the earlier and more acute stages of the disease, it is not prudent to have recourse to the speculum to ascertain whether the gonorrhœa is complicated with venereal ulcerations or not; our first duty is to subdue the acute inflammatory symptoms, and then, if the chronic stage be protracted, or do not yield to treatment, and there is reason to suspect the existence of deep-seated ulcers, the speculum may with propriety be used to clear up our diagnosis.

The internal treatment of gonorrhœa in the female is very limited. The remedies which are considered specific in this disease in the male, as copaiba, cubebs, &c., are here almost inert. Their action upon the vaginal forms of the disease is very feeble; their exhibition must be limited to the urethral varieties. Aperients, alkalies, sedatives, with diluent and demulcent drinks, constitute nearly the whole of our resources under the head of internal treatment.

The local treatment of acute vaginitis or urethritis in the female consists in the use of emollient and narcotic fomentations and injections, such as decoction of poppies, tepid water, &c., used alone, or rendered slightly astringent by the addition of the diacetate of lead or sulphate of zinc, in the proportion of from two to four grains to the ounce. This treatment, however, should not be long continued, if ineffectual; for we frequently find rest, emollient and narcotic applications of little use, the patient still continuing to suffer from severe pain and an abundant puriform discharge, whilst the mucous surfaces of the vagina, &c., continue red, and turgid with blood. Under these circumstances, or when the acute stage has in some measure given way, we may have recourse to astringent injections, with a view of preventing the discharge assuming the chronic form, and thus continuing for an indefinite period. The preparations of lead,[1] alum,[2] zinc, or the nitrate of silver,[3] may be employed for this purpose.

[1] ℞ Plumbi diacet.,
Zinci sulph., āā ℈j—℥j;
Aquæ, Oj. M.

[2] ℞ Aluminis exsiccatæ, ℈ij ad ʒij;
Decoct. papaveris, Oj.
M. ft. injectio.

[3] ℞ Agent. nitrat., ʒss—℥j;
Aquæ dest., Oj.

When the more acute stages of disease are passed, and the chronic form continues but little influenced by remedies, it will be well to examine the mucous surfaces of the vagina, &c., by means of the speculum. These may be found in several pathologic conditions; simply red, turgid, and hypertrophied, or covered with red isolated patches, aphthæ, vesicles, pustules, or superficial ulcerations. After the continuance of the disease for some time, the os uteri is always more or less affected; its lips are turgid, red, and everted, and generally covered with small ulcerations, granulations, or other changes, the result of chronic inflammation.

In the chronic forms of the disease, unattended by change of structure, as local applications or injections, we may employ solutions of tannin,[1] the decoctions of oak bark, tormentilla, or the walnut-tree leaf, or the tincture of iodine more or less diluted. The solutions of the chlorides of soda or lime are of use when the discharges are offensive and accompanied by ulceration.[2]

---

[1] ℞ Aluminis exsiccat., ʒij;
Acid. tannic., ʒj;
Aquæ, Oj.
M. ft. injectio. (Dr Tyler Smith.)

[2] ℞ Infus. rosæ co., ℥xivss;
Tinct. myrrhæ, ℥j;
Solut. sodæ chloridatæ, ℥ss. M.

M. Bonnet ('L'Union Médicale,' Sept. 1853) speaks highly of the tincture of iodine applied to the mucous membrane of the vagina in the gonorrhœa of women; it is chiefly indicated in mucous or muco-purulent discharges without much vaginitis. MM. Becquerel and Rodier recommend tannin dissolved in equal parts of distilled water.

Many of the injections spoken of coagulate the mucus of the vagina; before using them, the parts should be well cleansed with tepid or cold water, to remove all the clots formed by the preceding injection. In fact, in all cases the parts should be well washed out with water before the injection is used: it is in vain to attempt a cure without a proper syringe, such as I have recommended; and in many cases the injections or applications must be made through the speculum, or the parts affected will not be reached. Of these remedies, the concentrated solution of tannin is one of the best. It should be applied every three or four days, and in the intervals injections of cold water should be used. In estimating the value of injections in the treatment of the various forms of gonorrhœa or vaginitis in the female, I should say that the preparations of lead or zinc in cold or tepid water are suited to the acute stage, tannin more or less concentrated in the subacute, and the tincture of iodine in the purely chronic.

When the gonorrhœal discharge is secreted by the mucous surfaces of the vagina only, these applications may be thrown up with an ordinary female syringe; when, however, the os uteri or the canal of the cervix is the seat of the disease, it becomes absolutely necessary to use a syringe, by which a continual irrigation can be kept up; in this way a pint or several pints of injection may be thrown slowly up, without removing the pipe or tube of the syringe. For this purpose the syringe known as Higginson's answers very well, fitted with a vagina tube. In gonorrhœa of the uterus, injections of small quantities of the remedies already mentioned may be required to be made into the canal of the cervix itself; and in such case the injection must be made through the speculum, and only a few drams used.

When the chronic state of gonorrhœa in the female is accompanied by any alterations of tissue, these changes demand our first attention, since it is useless to attempt to check the discharge as long as these conditions remain upon which it depends. Ulcerations or papulous granulations should be cauterised with the nitrate of silver, or, what is better, with the liquor hydrargyri pernitratis, Ph. D. This caustic is to be applied by means of a camel-hair pencil, or a small roll of lint, to touch the diseased surfaces, these having been previously cleansed by dry lint or a soft sponge. When ulcerations themselves have destroyed the tissues more or less deeply, caustics must be employed with extreme caution. In these cases, the surface of the ulcers may be covered with calomel, upon which may be placed some dry soft lint, and afterwards passed into the vagina some lint soaked in one of the astringent or tonic injections previously mentioned. Where the disease has extended more or less into the canal of the cervix, and has assumed the form of uterine gonorrhœa, the solid nitrate should be introduced, and the mucous surface lining the neck well rubbed with it.

A true vaginal gonorrhœa may be confounded with vaginitis arising from other causes; and hence arises a question of great delicacy and importance, whether we are in possession of any facts which will enable us to establish a correct differential diagnosis between the two diseases.

In gonorrhœa the discharge is generally more abundant and more purulent, and the inflammation more acute, than in ordinary leucorrhœa. In the former disease, the glands of the groin are more frequently enlarged, tender, and painful; and in gonorrhœa the affection extends to the urethra in about two-thirds of the cases.[1]

Many causes contribute to render the treatment of gonorrhœa in the female tedious and unsatisfactory, and a disease more difficult to cure in this sex than in the male. The recurrence of the menstrual period is constantly interfering with the success of treatment; and a gonorrhœa that has been almost subdued in the interval, is renewed with all its intensity at the time of menstruation.

I believe that gonorrhœal diseases in the female are very rarely completely cured. They become chronic, and degenerate into what is called leucorrhœa. This, in most cases, arises either from neglect on the part of the patient, or the want of a proper knowledge of the disease, careful examination of the parts affected, and an appropriate topical medication on the part of the surgeon. If Mr Whitehead's notion be correct, that the canal of the cervix is the first part affected, and the vaginal or urethral mucous surfaces are only secondarily diseased, the malady is not likely to be cured without topical applications to the primary seat of complaint. Many modern writers have described gonorrhœal affections of the ovaries, and carrying out an anatomical to a pathological analogy, have considered a gonorrhœal ovaritis in the female as the analogue of a swelled testicle in the male.[2]

---

[1] See the paper of M. Ricord, 'Mémoires de l'Académie Royale de Médecine,' 1833.

[2] Acute gonorrhœal ovaritis has been noticed by Ricord, Vidal de Cassis, and others, as a result of gonorrhœa; also by Dr Tilt ('On Diseases of Women and Ovarian Inflammation,' 2nd edit., p. 220), who, with Dr Simpson, thinks it a rare disease. I have frequently noticed women who have been under treatment for gonorrhœa complain of pain and tenderness in the region of the ovary; this has been especially marked when discharge has diminished under the use of astringent injections. These pains are not in the groin, and must not be confounded with the symptoms produced by an inflamed inguinal gland. They generally yield to one or two relays of leeches, low diet, and gentle aperients, and diminish altogether should the discharge reappear or become more abundant. These symptoms are doubtless due to inflammation of the ovary, of a more or less acute character.

CHAPTER VIII.

OF THE SECOND CLASS OF PRIMARY SYPHILITIC DISEASES, CHANCRES, ULCERS, THEIR VARIETIES AND CONSEQUENCES.

THE effects produced by the application of the syphilitic poison or virus upon healthy tissues are very dissimilar; and this difference is so marked, that it has given rise to an opinion, prevalent amongst many modern surgeons, that there exists more than one syphilitic poison. Many distinguished men have lately maintained the duality of syphilis; though differing from each other in the explanation of the circumstances under which the double symptoms are manifested. Whether the different symptoms which are seen to follow the application of the syphilitic poison upon different persons, are due to the nature of the poison itself being different; or whether the difference is produced by the constitution of the individual to whom it has been applied; or whether, again, the variations are due to a mere local pathological condition on the part of the recipient, is difficult to say, each of these theories having found supporters in writers of great experience on the disease in question.[1]

---

[1] See Bassereau, 'Affections de la Peau Symptomatique de la Syphilis,' Paris, 1852; also, Ricord, 'Leçons sur le Chancre, par Fournier,' Paris, 1858. The 'Lettsomian Lectures on Syphilis, by Mr de Méric,' contain a very good and full account of these various theories: London, 1858, Churchill.

It has been supposed by some that the soft chancre is due to the virus being implanted on a subject previously tainted with syphilis, and that it is not, *per se*, a primary uncomplicated manifestation of syphilis. This is a mere theory. Chancres generally produce their like: a soft chancre produces a soft chancre, and an indurated chancre gives rise to an indurated chancre. To this rule there are some exceptions, which seem to favour the truth of the theory just mentioned. M. Ricord believes it probable that—

1. The simple or soft chancre of virgin subjects, *i.e.*, of subjects not previously afflicted with syphilis, is transmitted under the same form, that is, as a soft or simple chancre:

Two great classes of primary syphilitic sores are met with in practice, differing widely from each other in their appearance, their symptoms, their complications, their effects on the economy, and the influence of remedial agents upon them. Both these classes of sores are due to the action of a specific poison; but there are other ulcers which are met with on the penis, which are the result of promiscuous intercourse, which are not specific, and which result from the application of irritating discharges not of a specific character; these ulcers very commonly closely resemble chancre; such ulcers very frequently follow also the rupture of the vesicles of "herpes preputialis." The following classification will be found useful in practice.

1. Simple sores, without hard, elevated, or everted edges, and without any hardness of the base, not inoculable, in ordinary cases unaccompanied by bubo, and never followed by any constitutional disease.

2. Simple or non-indurated chancres, edges more or less hard or everted, no induration of the base or skin on which the sore rests; secreting pus more or less abundantly, inoculable with a lancet puncture; accompanied or followed by bubo, which is either of a specific or merely of an inflammatory character; secondary symptoms occasionally, but rarely following, if the bubo suppurates, especially specifically.

3. The same chancre may assume an indurated form, after the lapse of some days, from the effusion of lymph round its edges and at its base; this is phlegmonous, or inflammatory induration, which sometimes resembles specific induration so closely that a correct or positive prognosis in reference to constitutional infection is difficult. The state of the glands in the groin may assist in giving an opinion.[1] The phlegmonoid in-

---

2. The indurated chancre is also transmitted as an indurated chancre to virgin subjects, *i.e.*, subjects previously free from syphilis:

3. The indurated chancre is transmitted to subjects already tainted with syphilis under the form of a soft or simple chancre.

4. The soft chancre of subjects tainted with syphilis is transmitted either under the form of a soft or an indurated chancre. It seems probable that the form under which it is reproduced depends on the nature of its origin, *i.e.*, on the character of the chancre which originally produced it.—'Leçons sur le Chancre, par Fournier,' pp. 203, 204.

[1] In cases of soft chancre with phlegmonoid induration, the glands in

flammation resembles the base of a boil, and seems to be an integral part of the tissue on which the chancre is situated.

4. Chancres specifically indurated, secreting sparingly, or not secreting pus at all, non-inoculable commonly with a lancet puncture, or inoculable with extreme difficulty; several indurated glands in one or both groins; no suppurating bubo; constitutional symptoms all but inevitable and certain.

The simple, soft, or so-called non-infecting chancre,[1] is in most cases an ulcer more or less circular, covered with a yellow matter; the edges more or less elevated, everted, and irregularly broken; the ulceration appearing to burrow under the edge: it secretes pus abundantly, which is easily inoculable on the patient bearing the ulcer with a lancet puncture. It has no limited duration; although commonly healing in a few weeks, it may continue slowly to spread for months; it is that form of primary sore which most commonly becomes phagedenic. The skin or base upon which the chancre is situated may be as soft and as healthy as in the natural state; or it may assume a condition of hardness, due to the effusion of lymph into the cellular tissue around and under the sore, which I have already mentioned as inflammatory or phlegmonoid, but not specific induration.

The simple or soft chancre may or may not give rise to bubo. Should it do this, the bubo may be one of two kinds: the first is a sympathetic, simple glandular inflammation, a non-specific adenitis; the second is produced by the absorption of a specific pus, and if punctured, or when broken, ends in an inguinal sore, precisely similar in its nature to the chancre which occasioned it, differing from it merely in its seat. The pus from the specific bubo is inoculable, like that of the chancre which produced it, and, like the chancre, commonly becomes phagedenic, and ends in burrowing sores which run over the abdomen and

---

the groin may or may not be affected; in many cases one gland only enlarges, but does not suppurate. In cases where the glands are not at all affected, when the local condition of the sore is such as I have described, secondary symptoms may follow; but in cases where a single gland enlarges and does not suppurate, they are most likely. Should the gland suppurate, the occurrence of secondary symptoms is less probable.

[1] M. Clerc denominates the soft or simple chancre, 'chancroid,' limiting the term 'chancre' to the indurated or infecting sore.

thigh. I have seen these sores, unhealed twelve and eighteen months after the opening of the bubo, still spreading and still furnishing an inoculable pus. The simple chancre sometimes takes a long time to heal; indeed, the time is sometimes unlimited. I have known sores open four, six, and eight months, and even two years. In such cases the sore assumes varied appearances: sometimes it looks clean and healthy, and disposed to heal; at others it is covered with an ash-coloured slough. It ulcerates in one place and heals in another; but, in some cases, it runs over the whole body of the penis, and produces serious mutilations: this may be termed ulcerative phagedena. The ulcer is sometimes indolent, at others very sensitive and painful; it frequently resists the most varied treatment, both simple and mercurial. The skin on which the ulcer rests is generally quite healthy, and not at all indurated: the edges of the sore, however, are commonly hard, round, and elevated; and under these hard edges the ulceration frequently burrows. By raising the edge, we commonly find a creeping ulceration under it.

Should a simple chancre have been followed by a specific bubo in the groin, the latter puts on a character resembling the chancre, spreading by a creeping ulceration, not only in the groin, but upwards on the abdomen, and downwards on to the thigh. These sores are jagged and irregular, sometimes clean and covered with granulation, the next day foul and covered with slough, the edges, generally raised and hard, appearing to present a barrier to the healing the ulcer; when these ulcerations run in the track of large blood-vessels, the coats of the latter may become involved in the ulceration, and a serious, if not fatal, hæmorrhage follow. These ulcerations following suppurating buboes are commonly purely syphilitic; they may occasionally be inoculated after they have been in existence for months. Mercury has very little influence over the simple chancre with the soft base; it is to this species of sore that the non-mercurial treatment is especially applicable; it generally yields to this treatment in a few weeks. Should this fail, mercury may be tried. In the phlegmonoid variety mercury is more strongly indicated, especially if, after a reasonable time spent in pursuing the non-mercurial plan, the sore still continues open, and the hardness undiminished.

The chancre specifically indurated differs in many particulars from the varieties just described. This is the "chancre infectant" of M. Ricord, the infecting sore of some English writers; the true Hunterian chancre; the true syphilis of Mr Carmichael. The true indurated chancre is a sore which secretes but little; its surface is red, glazed, and sometimes quite dry; the secretions from the true indurated or infecting chancre, if not artificially irritated, when examined under the microscope are seen to "consist of epithelial debris floating in a serous fluid, or of globules of various sizes and shapes, which do not, upon the addition of acetic acid, yield the well-defined nuclei characteristic of pus." (Henry Lee, 'Medico-Chirurgical Transactions,' vol. xlii.) The induration which marks the character of this form of chancre is termed specific; it is moveable under the skin, and does not, like phlegmonoid hardness, appear to form a part of the tissues on which the chancre rests. It appears like a foreign body under the skin, the hardness terminating abruptly in the tissues on which it is situated. This induration is placed under and around the ulcer, occasionally at the side of it; and in some instances it does not come in till the sore has healed, and here it appears under the cicatrix of the original sore, or at its side. The chancre in such cases, although apparently healed, ulcerates again into the depths of this induration; and thus we have the excavated ulcer, cut out as it were from the substance of the part underneath it. At or about this period, glands in one or both groins become enlarged, hard, and tender, but have no tendency to suppurate. The condition of the glands of the groin is one of the best tests of the character of the sore, if the nature of the induration should deceive us.

The bubo symptomatic of the infecting chancre is an indolent tumefaction and induration of the glands in the groin corresponding to the chancre; they form a series of small tumours, independent of each other, and moveable in the parts which surround them. They give to the finger the same sensation as the base of the chancre: it is an elastic induration, feeling like a piece of cartilage.[1]

The glands in the groin enlarge and harden at or about the period that the base of the chancre becomes indurated. The account I have given of this sore in the 'Association Journal,' and that now published by M. Ricord, in his 'Lectures on Chancre,' are substantially the same. Mr Porter, in some excellent papers that have lately appeared on syphilis, in the 'Dublin Journal,' ignores the condition of the groin as a test of the nature of the infecting character of the sore.[1] I lean, however, very strongly to the opinions of M. Ricord on this point; and, in fact, my own published opinions on this head correspond very closely with those of M. Ricord.—See 'Association Journal,' November, 1856.

---

[1] Ricord, Lectures, by Fournier, p. 115.

The indurated or infecting chancre, now described, is always followed by constitutional infection, unless a proper treatment be adopted. This induration under the sore and in the groin is the transition state between the local and constitutional disease, and these indurations mark the constitution as already infected.[2]

The indurated chancre is very difficult to inoculate;[3] it is

---

[1] 'Dublin Journal,' &c., Nos. 45 and 46.

[2] What renders this almost a matter of certainty is the identity of structure described by Lebert, 'Traité d'Anatomie Pathologique,' vol. i., p. 179, and Virchow ('Syphilis Constitutionnelle,' par Picard, p. 181), as existing between the induration of the infecting chancre and the morbid products or alterations produced by many forms of constitutional syphilis.

[3] The infecting or indurated chancre is, however, inoculable, although with difficulty. I have already detailed an experiment by Professor Faye in reference to this point. Diday, M. Clerc, and others, have succeeded in producing a characteristic disease by inoculation with the secretions from an indurated sore; but whilst the effects produced by the inoculation of a soft chancre are immediate, those succeeding to the inoculation of the infecting chancre are not seen till periods very remote. M. Diday gives as the average in 29 cases 14 days; M. Dron mentions a case where 19 days elapsed from the time of the introduction of the virulent pus under the epidermis till the appearance of the pustule; M. Clerc mentions incubation of even 30 days. These experiments were, no doubt, made on patients bearing the chancre with which they were inoculated.

There is no doubt in my mind that the secretions from the indurated chancre are easily and certainly inoculable on a healthy subject; how otherwise could the infecting chancre be propagated? although they may be with difficulty inoculated on the subject bearing the disease; in this respect the inoculations fail simply in the same way that inoculations with secondary syphilitic pus fail on the subjects bearing the disease, but which the simple or soft chancre, with a profuse purulent secretion and a soft or phlegmonoid base, which so easily produces a characteristic pustule when submitted to this test. This is the chancre which inevitably poisons the system, unless it be completely destroyed before induration takes place; and even then the patient is not always safe. This induration rarely appears before the third day, and it has been asserted that chancres of this kind completely destroyed before the fifth day are never followed by constitutional disease: by this, however, is meant the fifth day from the exposure to contagion. After the chancre has become specifically indurated, and the glands in the groin enlarged and tender, cauterisation is no longer available, as these are symptoms indicating that the system is already affected, or that it is about to become so. I shall return to the question of cauterisation as a means of preventing constitutional taint when speaking of the abortive treatment of chancre.

It is in cases of indurated or infecting chancre that mercurial treatment is especially indicated; and here it should be employed properly, fully, and perseveringly. Its effects are here marked and certain, and it is, beyond all question, in such states the most powerful and certain therapeutical agent that can be exhibited. Internally exhibited, it frequently fails; but when used in the form of vapour, and combined with frictions, it retards, weakens, or altogether eradicates the syphilitic diathesis or constitutional taint. I could multiply cases by hundreds of complete success in such states by the persevering use of the

---

succeed when the inoculations are made on a healthy subject not infected with syphilis. Experiment has now set this matter at rest.

A remarkable fact in the history of the experiments already detailed, is the long period elapsing between the inoculation and the effects produced by it. This, however, is in distinct relation with what occurs in physiological or natural inoculation. The infecting chancre often does not appear for several weeks after exposure; I have witnessed several cases, about which there is not a shadow of a doubt, where the disease had not appeared till one month, five weeks and six days, and six weeks, after exposure. These cases were all indurated chancres, and all followed by formidable constitutional disease.

See for details of the experiments quoted, a paper by Dr Achille Dron, in Diday and Rollet's 'Annuaire de la Syphilis,' Paris and Lyons, 1859; 'De la Méthode Destructive des Chancres, &c.,' p. 208.

treatment I have mentioned. There is no other that will bear the least comparison with it in point of efficacy, either as regards its safety to the patient or its effect upon the disease. (See the chapters on 'Mercurial Treatment' and the 'Mercurial Vapour Bath.')

The difference in the appearance of primary syphilitic sores depends frequently on the anatomical organisation of the parts on which they are seated. 1st. The elevated soft chancre is most commonly seated on the internal surface of the prepuce. 2nd. On the angle between the glans and prepuce, a common seat of chancre, the bottom of the ulcer has always a honeycomb appearance. 3rd. On the side of the frænum the ulcer is deep and burrowing; these last two varieties depend for their peculiarities on the lax cellular tissue of the parts on which they are seated; this ulcer frequently perforates the urethra. 4th. On the glans penis the sore is excavated and hard, with ragged and thick edges, but never burrows, or has that honeycombed appearance at the bottom I have just described; it spreads generally by ulceration on the surface, and not by ulceration in depth. 5th. Chancre in the interior of the fossa navicularis is accompanied by great induration of the glans penis, and very commonly by phymosis; this ulcer also has a tendency to perforate the urethra on its lower part.

Little doubt can generally exist with regard to the nature of a chancre; the history given by the patient, its situation, with its aspect and the state of the glans in the groin, are generally conclusive on this point. There may, however, occur cases which may puzzle the most experienced surgeon. The test of inoculation is here very valuable. Patients are naturally anxious to know whether an ulcer, following a suspicious intercourse, is a "chancre," *i. e.* a syphilitic sore, liable to be followed by a constitutional taint; and it is most important that the surgeon should be able to give a reasonable opinion on this point. I have shown how far inoculation will aid him. The miscroscope may also assist us as a means of diagnosis. I have seen ulcers on the lip and penis, of syphilitic character, very closely resemble cancer. If the test of inoculation failed in these cases, the secretions may be submitted to microscopical examination, where we should at once distinguish between the pus globule of the syphilitic ulcer and the cancer cell. I have never been able to distinguish by the microscope any difference between the pus of a primary syphilitic sore and that of an ordinary ulcer, and I have never been able to detect the existence of the animalcules described by Donné as existing in the pus of a chancre.

Primary syphilitic ulcers are commonly situated on the prepuce, the glans, or the body of the penis, at the orifice, or other parts of the urethra, on the mons veneris, or lower part of the abdomen. I have seen them also on the tongue and on the finger, and they have been observed also "on the chin, the lips, the scrotum, the anus, the thigh, the eyelids, the leg, and the nose."[1] Ricord and Vidal have also seen them in the bladder.

The whole probability of success, in what is termed the abortive treatment of a chancre, turns upon the question whether this be at first a local disease merely, or a local manifestation of a constitutional taint. There can be little doubt that primary syphilis is in most instances a local disease; but there are cases occasionally occurring which seem to favour the truth of the latter position. A primary sore generally appears from four to eight days after suspicious intercourse. If, however, a chancre be inoculated, the effects are immediate. In the one case, however, the virus is introduced under the epidermis by the lancet, and in the other it only penetrates this membrane by a process of slow absorption, supposing the epidermis to be healthy and unbroken. The condition of the epidermis will explain a great deal in reference to the incubation of chancre; should it be broken or denuded, the inoculation, like the lancet puncture, is immediate; under other circumstances, various periods elapse before the appearance of the disease. This, I think, will explain what is termed the "incubation" of chancre; and this view is supported by the experiments of Mr Ceely, of Aylesbury, who tells us that he has frequently succeeded in producing the vaccine pustule by keeping lymph in contact with the epidermis for a certain period of time, "*without abrasion of the cuticle.*"[2]

---

[1] M'Carthy; 'Thèse Inaugurale,' p. 13, quoted by Vidal.

[2] The infecting or indurated chancre sometimes does not appear till long periods after exposure. I have carefully noted many cases of this kind. In

In cases where long periods have elapsed between intercourse and the manifestation of disease, we must either admit that the virus has lain in contact with the skin for a long time without producing any effect, or that the local disease then set up is but the first indication of an already existing constitutional taint. The latter opinion has been maintained by Vidal and others, and brought forward as an argument against the abortive treatment of chancre, which I am about to consider. I must confess that I lean to the first opinion, viz., that the virus has remained in contact with the cuticle for a long period without producing its customary effects. We are daily witnessing this period of incubation, extending not only over months, but even years, in the development of secondary or constitutional diseases. Again, if the local disease was the first manifestation of a constitutional taint, why is it, under such circumstances, always developed on the part exposed to infection? and why does such a sore precisely resemble an ordinary chancre occurring at the usual period after exposure? Independent of these reasons, the test of inoculation might add additional certainty to the nature of the sore thus produced.

The abortive treatment of a primary syphilitic sore consists in its early and immediate destruction by caustics, the object of which is to eradicate the disease at the onset, and thus prevent all risk of constitutional taint; but in order to ensure this, according to M. Ricord, the chancre is to be destroyed before the fifth day, and this is not to be reckoned as the fifth day from the appearance of the disease, but the fifth day from the "exposure to contagion."[1] The abortive treatment has a two-fold object: it either protects the constitution from infection, as in cases of the infecting chancre, by destroying syphilis in its

---

four cases especially the dates were remarkable. None of these patients had been affected with syphilis before, and in none had any intercourse taken place in the intervals. I knew all the patients; there could be no motive for deception, and there could be no mistake. In one case the chancre was 14 days before it made its appearance, in a second 30 days, in a third five weeks and six days, and in the fourth six weeks: all these cases were followed by bad secondary symptoms.

[1] Ricord's Letters, by Stapleton, p. 39.

germ; or, in cases of the soft chancre, it converts the specific sore into a simple one, and thus prevents the local ravages of the disease. In order that it should be successful, it is necessary that the infecting chancre should be destroyed within five days of the exposure to contagion. Professor Sigmund, of Vienna, says that in a thousand cases, extending over a period of eleven years, he has known but two cases of secondary disease where the chancre was destroyed before the fifth day. Why the fifth day is mentioned, is because the infecting chancre has rarely become indurated before this period, although it does frequently much later; and before induration commences no absorption has been supposed to have taken place. The abortive treatment is not, however, always successful when practised on the infecting chancre within the periods laid down. M. Diday mentions cases where the chancre was destroyed before the fifth day from exposure, and yet constitutional symptoms followed. I have destroyed an ulcer thoroughly and completely, and all the surrounding tissues, to the depth of half an inch, in two hours after the appearance of the chancre, and yet bad constitutional symptoms have followed; M. Langlebert ('Moniteur des Hôpitaux,' Dec. 21, 1858,) speaks of a student of medicine whose chancre was destroyed on the second day, and yet constitutional symptoms followed two months after. A positive opinion cannot be given in all cases as to the protective power of the abortive treatment; nevertheless, the destruction of a chancre is to be attempted, unless there are some special contra-indications, as soon as it is presented to our notice; but we cannot say that such destruction will inevitably convert a specific ulcer into a simple one, or prevent the occurrence of constitutional symptoms. It, however, may, and therefore the practice is a safe and a proper one; we gain nothing by neglecting it.

A chancre, when first presented to the notice of the surgeon, is generally in one of two states,—either in that of a small pustule with its contents yet undischarged, or a minute ulcer. In whatever state it may be, our first duty is to endeavour, by the use of escharotics, to convert the specific sore into a simple one. For this purpose many authors recommend either a strong solution of the nitrate of silver, or the application of this caustic in substance.

When the nitrate of silver is used, if the disease be pustular, it will be necessary to open the pustule with the point of a lancet, to discharge its contents, and rub the whole surface and edges of the ulcer thus produced with the nitrate of silver previously cut to a sharp point; if the disease be an open ulcer, it is to be treated in the same way. The nitrate of silver thus applied will sometimes have the effect of producing a simple sore, but it will more commonly give rise to considerable irritation and inflammation, whilst the specific character of the sore is not destroyed. I have seen so much evil, in this respect, from the use of this escharotic, that I have now abandoned its use under such circumstances, and have recourse to other caustics of a more powerful character.

The great evil in the use of the nitrate of silver in these cases is, that it is powerful enough to irritate, but not sufficiently powerful to destroy. We want a remedy that will at once disorganise the tissue to a depth coequal with that of the chancre. For this purpose I now employ several remedies: highly concentrated nitric acid, the acid nitrate of mercury, the acid nitrate of silver, or the potassa cum calce of the London Pharmacopœia. I have already given a form for the preparation of the second of these remedies; the third is made by dissolving a drachm of the nitrate of silver in an ounce of nitric acid. When it is determined to destroy a primary venereal ulcer with any of the first three caustics, a camel-hair pencil must be dipped in them, and the surface and edges of the sore pencilled thickly over; if the acid be sufficiently concentrated, the whole surfaces touched are at once destroyed, and converted into a yellow eschar, which, on separating, generally leaves a clean simple sore underneath.

When the potassa cum calce is employed, it must be made into a paste of moderate consistency with spirits of wine, at the time it is wanted for use, and the sore and its edges covered with it. When it has been on a few seconds, a smart burning pain is felt, which continues to increase as long as the caustic is suffered to remain on, which it should be from half a minute to a minute, or even longer, according to the effects produced. After this the caustic must be all removed by means of a fine bone spatula, and the black eschar left may be covered with a poultice, a cold saturnine lotion, or fine, soft, dry lint. The pain soon subsides after the caustic has been removed, and in about half an hour the patient is generally pretty comfortable. The aggregate amount of pain produced by the application of this remedy is not so great as that by the nitrate of silver, whilst the effect of the potassa cum calce is certain; all the parts touched by it are at once destroyed, and, on the separation of the eschar, we have a clean granulating sore left, which commonly yields with great rapidity, particularly if the ulcer be a recent one.[1]

Whenever, then, a primary venereal sore is presented to us, unless there be some special contra-indication in its situation or condition, it should be immediately destroyed after the manner laid down. If the sore be recent, *i. e.*, of few days' standing, it is very probable we may eradicate the disease at once, or convert a specific sore into a simple one; the constitution may not as yet have become infected. A poultice is the most convenient and best application during the time the eschar is separating, if the patient can rest, which should always be urged upon him as an essential point, if it can possibly be managed. The moment the eschar begins to be detached, and a secreting surface is exposed, the poultice must be done away with and other remedies employed. Of these, weak lotions are the best. I employ weak solutions of the nitrate of silver, acetate or sulphate of copper, alum, or zinc, or tannin in port wine, in the proportion of about two drachms of the former to six ounces of the latter. There are many objections to the use of the powerful caustics commonly employed, whilst the milder ones are utterly inefficient. The objections are, the violent pain they occasion, the length of time required for their application, their occasional and even frequent failure either in preventing constitutional infection or converting the soft chancre into a simple sore, and the swelling and inflammation of the penis which they frequently induce. Out of 66 cases treated by cauterisation with the chloride of zinc paste by M. Diday ('Annuaire de la Syphilis,' p. 230) 5 had secondary symptoms, and in 5 others the specific character of the sore was not destroyed; 56 were cured. The chloride of zinc paste should be left on the sore from one to three hours; the black caustic of Velpeau, the carbo-sulphuric caustic, must be suffered to dry on and separate with the eschar. In cases of soft chancre, the abortive treatment does not always prevent the occurrence of a virulent bubo.

---

[1] M. Ricord has lately recommended powdered charcoal made into a paste of convenient thickness with sulphuric acid. Other surgeons have employed the chloride of zinc with plaster of Paris or common flour, in the proportions of one for two parts of the chloride of zinc, and enough water to form a paste of convenient thickness.

There are certain conditions of primary venereal ulcers which contra-indicate or actually prevent the use of caustic in the first instance. Caustic is useless after specific induration has commenced; it cannot be used in cases of chancre with phymosis, or in chancres situated within the urethra. It should not be used in cases of soft chancre, in irritable, sloughly, or inflamed conditions. If a chancre of this kind produces violent inflammation of the penis, this must be reduced by a proper general treatment before we have recourse to these remedies, which may be used after the inflammation has been subdued, if the sore be foul and stationary, and show no disposition to heal. The situation of a primary venereal sore frequently altogether prevents the use of the remedies in question; for instance, chancre situated under the prepuce, and producing complete or partial phymosis. In such cases there is generally more or less inflammation or tumefaction of the penis, more or less discharge from the preputial opening, and a distinct hardness can be felt, tender to the touch. This hardness may be lesser or greater according to the size of the concealed sore; I have felt it extending from the prepuce, under the skin of the penis, down nearly to the pubes. It is almost useless, in such cases as these, to attempt the reduction of the inflammation of the penis by the ordinary means, which would succeed, were the surface of the sore exposed and not so situated. It must be borne in mind that the situation of the sore produces and keeps up the inflammation, and the phymosis which is dependent upon it. If the inflammatory symptoms in such a case run very high, general bleeding, aperients, rest, fomentations, and low diet may be employed as preliminary measures, and we may succeed in subduing the inflammation more or less completely by these means. We must not, however, conceive that we have completely succeeded, unless we can reduce the phymosis, and expose the sore to view, the grand object towards which all our treatment should be directed.

In chancre, with inflammation of the penis and phymosis, if, after a reasonable time spent in antiphlogistic treatment, the inflammation and tumefaction of the penis do not give way, and we cannot denude the glans, recourse must be had to the operation for the relief of the phymosis, and the surface of the sore then exposed must be instantly pencilled over with one of the liquid caustics before recommended. By these means we shall prevent the inoculation of the recently-cut surfaces. The parts should then be covered with pledgets of lint soaked in an appropriate lotion.

Many primary venereal ulcers are attended, in the commencement, with more or less local inflammation, sometimes of so violent a character as to produce pretty smart symptomatic fever. Indeed, some of the most appalling results witnessed, under circumstances of this kind, arise from the excess of the local inflammation and the sloughing, rapid ulceration, or ganggrene, which is its result. I am convinced that many of the ill effects produced by primary sores are attributable to the want of a proper regimen on the part of the patient, and, perhaps, also to a want of sufficient directions on this point on the part of the surgeon.

Whenever we are consulted by a patient with a primary venereal ulcer, particularly if it is the first from which he has ever suffered, it will become necessary to point out to him, in as strong terms as possible, the necessity of his adhering rigidly to a very abstemious diet till the ulcer assumes a granulating condition; it is well, also, at this period, to administer repeatedly, for some few days, aperient medicine, and to insist on a total abstinence from malt liquor, wine, or spirits. If the patient, from circumstances, cannot lie by and rest altogether, he should be recommended to retire early to bed, rest in bed being a most important auxiliary in the treatment of all forms of primary syphilis. It is very easy to regulate all these matters in the hospital; but in private practice, to which I am now more particularly referring, such means cannot always be adopted; and I am afraid their extreme importance and advantage are not always stated in as strong a manner as they should be to the patient.

Whether it be the intention to submit the patient ultimately to mercurial treatment or not, these preliminary cautions should never be omitted. Many of the evils attendant on mercurial courses are to be attributed to not preparing the patient by diet, rest, and aperients, for the administration of this medicine. I do not subscribe to the tenets of those who treat syphilis systematically on what is termed the rational or simple plan, without mercury: but I must bear so far testimony in favour of this school to say, that they have conferred an immense advantage upon society by pointing out that diet, rest, simple dressings, and an antiphlogistic regimen, have a vast influence over the ravages produced by syphilis; and wherever mercury is exhibited for the cure of syphilis, more particularly its primary forms, let the concomitant measures relative to diet and regimen be these which the rational school teaches, and I have just laid down.

If mercury be given for the cure of a primary venereal ulcer, it should not be used till the patient has been prepared to receive it, by adopting for some days the regimen laid down, and till all inflammation and irritation has subsided; it may then be employed with every hope of realising its most beneficial effects. To throw it carelessly in without these precautions, under a vague and false impression that mercury is a specific for syphilis, is worse than injudicious; it is criminal, and cannot be too much censured. Mercury will be indicated after the application of caustics, if the chancre become indurated after the separation of the eschar, or in cases of induration of the cicatrix after the apparent healing of the sore. In cases of the soft chancre, it may be used under the circumstances already advised in the chapter on 'Mercurial Treatment.'[1]

---

[1] The reader may consult the works of Wallace, Ricord, Desruelles, and Cullerier, on the points here in question. He will find all admitting the efficacy of mercury in hastening the cicatrisation of a primary venereal ulcer under the circumstances I have advised or permitted. The last three recommend mercury, when the sore is indolent, does not cicatrise under the simple plan; when its edges are hard and elevated, or the sore leaves behind it in healing an indurated cicatrix.

Mercury, although not a specific against syphilis, is the most powerful therapeutic agent we can employ in many cases in its cure. (Ricord.) I

The local treatment of the sore must also be changed when the eschar produced by the caustic has separated, and the granulating process has commenced; and as mercurial applications are generally injurious during the ulcerating stage of chancre, so are they beneficial during the stage of reparation. Local applications during this stage may consist of calomel and lime-water, or weak solutions of the acetate or sulphate of copper.

Local dressings to chancres deserve particular notice. They consist in the application of aromatic wine,[1] medicated either with tannin,[2] with opium,[3] or with both; or in solutions of sulphate of zinc,[4] or the sulphate or acetate of copper,[5] or potassio-tartrate of iron.[6] These are the best applications I know of to chancres in various states of ulceration, and may be used to sores after the eschar produced by the caustic has separated, or in cases where caustic or the abortive or destructive method has

---

am far from rejecting the internal use of mercury in the treatment of the primary venereal ulcer. I believe that in many cases it is necessary, and even indispensable. (See Cullerier, op. cit., p. 186, and the remarks of Desruelles, op. cit., pp. 313-15.)

[1] The aromatic wine of the French Codex is composed of four ounces of aromatic herbs, (rosemary, rue, sage, hyssop, lavender, absinthium, origanum, thyme, laurel leaves, the flower of the red rose, chamomile, mellilotum, and elder,) digested in two pints of red wine for eight days.

[2] ℞ Vini aromatici, ℥viij;
Tannin, ℈ij. M.

[3] ℞ Vini aromatici, ℥viij;
Tannin, ℈ij;
Ext. opii pur., ʒss. M.

Mr Maunder recommends in lieu of the aromatic wine, one dram of the tincture of the sesquichloride of iron to eight ounces of distilled water.

[4] ℞ Zinci sulph., gr. ij;
Tinct. lavandulæ co., ʒj;
Aquæ destillat., ʒvij. M. ft. lotio.

[5] ℞ Cupri sulphatis, gr. j ad gr. x;
Aquæ rosæ, ℥j. M. ft. lotio.

℞ Cupri acetatis,
Aluminis exsiccatæ, āā gr. ij ad gr. xv;
Hyd. chloridi, gr. v ad ʒss. M.

[6] ℞ Ferri potassio tart., gr. x ad ʒj;
Aquæ, ℥j. M.

not been practised. I have long proved the efficacy of these remedies; they are what I daily employ in the ulcerating stages of primary syphilis.

The sores are to be carefully washed with one or other of these preparations, and afterwards covered with soft lint, moistened in them. Care must be taken, in renewing the dressings, to soften the lint well before it is removed, so that no part of the surface or surrounding skin may be torn away with the lint.

These preparations possess the advantages of modifying the surface of the sore, of promoting its rapid cicatrisation, of diminishing the secretion of pus from its surface, and, by their astringent properties acting upon the surrounding tissues, of preventing the extension of the disease, or the formation of fresh chancres, a circumstance common in other modes of dressing. The use of the aromatic wine, with or without tannin, is contra-indicated when the surface of the sore is dry, furnishing no secretion and remaining indolent, or again where, the edges being indurated, these dressings seem to increase the induration.

The state of the economy at large demands much attention on the first appearance of a venereal ulcer; and we must here bear in mind the golden rule, that the varied appearances of primary venereal sores, and the characters they afterwards assume, depend very much, if not altogether, upon the natural constitution of the patient, and upon the particular condition of his health at the time he imbibes the venereal poison. Thus, in many instances, a primary venereal sore upon the penis produces the most intense local inflammation and fever. Under these circumstances the patient must be treated upon general principles: he should be restricted to the simplest diet, and kept quiet in bed, whilst emollient fomentations or poultices are applied to the sore. The local inflammation and fever are first to be removed, in these case, before we think of resorting to escharotics; and should the stage of ulceration be arrested by these means, and the sore assume a disposition to heal, it will not be necessary, or even safe, to use them at all, but the granulating ulcer must be treated in the way we shall presently mention.

Cullerier, in the treatment of the primary venereal sore, confines his patients to bed, and keeps them upon low diet; if there be any local inflammation or fever, he bleeds them from the arm, and covers the sore with a poultice, the opiate cerate, or a strong aqueous solution of opium. All local inflammation and accompanying fever are to be subdued before the use of any caustic; and, during the two or three days which are generally spent in its application, the patient should live low, keep his bed if possible, and take daily aperients, unless specially contra-indicated. This plan has the twofold object of preventing or mitigating the inflammation which may be caused by the application of the caustic, and of preparing the patient for any subsequent general or local treatment the nature of the sore may require.[1]

During the earlier periods of the local treatment of chancre, a regimen suited to the constitution of the patient should be observed. Under this point of view no exact rules are to be laid down. (See what I have already said on this subject in the chapter on 'Non-mercurial Treatment.') In some cases a purely antiphlogistic treatment becomes necessary, whilst in others tonics and a nourishing diet are required. The state of the general health requires particular attention; for it must be recollected that from a bad constitution, or one enfeebled by previously existing disease, result those complications and severe local affections so frequently observed during the progress of primary venereal sores.

The more mildly primary ulcers are treated locally, the less likely are they to be followed by those appalling complications which sometimes accompany them, such as rapid ulceration, sloughing, or disorganisation of the penis and scrotum, which used to be so common under the old treatment of stimulating mercurial applications during the first days of chancres. I dwell upon this point, because I deem it of the first importance, whilst we have the universal testimony of modern writers on syphilis in its favour. To well understand the principles on which the local as well as the general treatment of primary sores must be conducted, the surgeon must constantly bear in mind the two stages of chancre: in the first we have to do with a specific sore, irritable, poisoned, and poisonous, liable to be irritated by the least stimulus; whilst in the second we have a simple ulcer destitute of all these characters.

---

[1] Where for the reasons already stated caustics are inapplicable, or where the patient may fear or object to their use, an attempt may be made to destroy the syphilitic virus by the application of the preparation suggested by M. Rodet, of Lyons: this consists of perchloride of iron, hydrochloric acid, and citric acid, of each one dram, with one ounce of distilled water. A drop or two of this preparation is to be put on the chancre, or some lint saturated with it laid upon it, and suffered to remain for a longer or shorter period according to the effects produced. M. Rodet says this neutralises the syphilitic virus, and also the vaccine virus. Many cases are detailed, which seem to favour the assertion of M. Rodet. The reader will find a full account of these cases in the 'Compte-rendu du Service Chirurgical de l'Antiquaille, &c., par A. Rodet,' Lyon, 1855, pp. 62-80.

The local applications must be varied to suit the actual condition and aspect of the sore: should it be painful, opium combined with the remedy we apply is useful. Should the irritability of the ulcers be of the inflammatory kind, it will be necessary to leave off all stimulating dressings, and have recourse to emollient fomentations; as topical applications, when the inflammatory symptoms have subsided, solutions of the nitrate of silver, sulphate or acetate of copper or zinc, or pomades of calomel and opium, or mercurial ointment and opium. All these varied preparations may be found useful in various conditions of the surface of the primary venereal ulcer. The condition of the latter is the only circumstance that can guide us in their proper mode of application.

Dr Wallace thought topical mercurial preparations of great value in the treatment of primary venereal sores in the second stage, and believed that in some measure they superseded the necessity of an internal mercurial treatment. "In dispensary practice, and among the lower ranks of society, the internal administration of mercury, particularly at inclement seasons of the year, can seldom with safety be recommended. In such persons, and under such circumstances, topical applications are of infinite value. In cases of this kind I generally confine my treatment to them, in conjunction with the internal use of nitrous acid, and by these means succeed for the most part in healing the disease with rapidity. Cases treated in this way are also very rarely followed by secondary symptoms.[1]

The primary ulcer specifically indurated demands a treatment, both local and general, different from the simple or non-indurated forms of disease. I have already explained why its destruction by escharotics must not be attempted after induration has taken place. Should it be first presented to our notice already specifically indurated, or should induration come on after the use of escharotics, or should induration appear on the site of the old cicatrix after the ulcer has apparently healed, the patient must be placed on a mercurial course, regulated by the rules already laid down; and this must be persevered in till the ulcer has healed, and all indication of the cicatrix has disappeared.

I adopt the following plan in the treatment of the indurated chancre:—I confine my patient to a milk or broth diet, submit him to the action of the mercurial vapour-bath daily, and direct him to use mercurial frictions every night. I continue this plan till the gums are red, elevated, and spongy; the vapour may then be administered every two or every three days till the sore has healed and the induration gone. Two or three days' treatment generally makes a marked impression on the disease, even before the constitutional effects of it are ascertainable. I will venture to affirm, that this is by far the most certain method of removing the induration and preventing constitutional taint from an indurated primary sore; and it has the vast advantages of being free from the evils of a mercurial course, as commonly conducted. I have treated patients by hundreds on this plan, and I have never seen any evils from its use that could occasion more than a passing anxiety; in a few instances only has a smart ptyalism or diarrhœa been induced, easily controlled by opiates, the chlorate of potass, and astringent gargles.

After the healing of a primary sore, the cicatrix occasionally remains hard and elevated, and is prone to ulcerate again on the occurrence of the slightest exciting causes. This local condition denotes the persistence of syphilitic action in the system, and is the "forerunner of accidents to come." A patient in this condition may daily look for secondary local ulcerations of a rapid and destructive character, and constitutional symptoms of a more or less formidable kind. It, therefore, behoves him to adopt speedy means for the removal of the induration, which may be generally accomplished, and till that period arrives he cannot be considered safe. I could detail a number of cases of induration of this character which I have entirely succeeded in removing by the continuance of the plan just laid down for the treatment of the indurated chancre; a gentle and continued action of the remedies should be kept up till the induration has entirely disappeared. It is a rare circumstance for this plan of treatment to fail: should, however, the induration not appear to yield after two or three weeks' treatment by vapour and friction, mercury may be administered by the mouth. One preparation of mercury will succeed, occasionally, when another has failed; the plan laid down is applicable and successful in the great majority of cases, but exceptions will from time to time occur. Specific induration always remains for a time after the chancre has apparently healed, and in many cases, as I have already said, a secondary ulceration, and even a third, will take place as long as the induration remains. Should this not occur, the induration remains, more or less marked, for two or three months after the chancre has healed; sometimes much longer. Cases have been recorded where these indurations have remained for years. (See M. Puche's tables, quoted by M. Ricord in his Lectures on Chancre.) I have seen since then one case where a distinct induration on the seat of an old chancre has remained for several years; but in such instances the indurations appear to have lost all their specific character, for in two cases the subjects of them had been some time married, and both wives and children were in good health.

---

[1] Wallace, p. 113. These remarks evidently allude to cases of soft chancre in the indolent stage.

I wish here to make a few remarks on buboes in connection with primary sores, although I have devoted a separate chapter to this subject. Buboes form only in the glands which are placed on the course of the lymphatics in connection with the primary sore; and hence it is that buboes in the groin do not form as a consequence of ulcers confined to the glans penis, since the lymphatics of the glans penis do not pass through the glands situated in the groin, but under the arch of the pubis, to open into glands placed within the pelvis. The lymphatics from the skin of the penis, from the angle between the glans and prepuce, from the crypts on the side of the frænum, and from the scrotum, all pass through the glands in the groin, and hence chancres situated in any of these localities are liable to be followed by bubo. When the chancre is soft or simple, no bubo may form, if the patient keep quiet, is properly treated, and the local applications used not of an irritating nature. Under other circumstances, a gland in one or both groins may be attacked with inflammation (adenitis), which may or may not run on to suppuration; in a great majority of instances suppuration does take place, and frequently the chancre has been long healed before the suppuration in the gland is complete. The cause of these buboes is either an extension of inflammation along the lymphatic to the gland, produced by ordinary non-specific causes, or by the absorption of a specific pus from the chancre itself.

Buboes are often much more formidable diseases than the chancres which cause them. The non-virulent bubo is often followed by a succession of abscesses, sinuses, and induration of the surrounding integument and cellular tissue, which are sometimes months disappearing; the non-virulent bubo is frequently produced by walking, riding, skating, or free living, whilst the patient has a primary sore still uncured: the local applications to the primary sore frequently disperse this kind of bubo; the use of escharotics frequently produces it, whatever may be said to the contrary.

The open virulent bubo becomes formidable from its liability to assume a form of ulcerative phagedena: the ulcerations run upwards over the abdomen, and downwards over the thigh; they preserve their virulence for weeks or even months after the chancre has healed; during which periods, if inoculated, they produce a virulent ulcer; they produce fearful mutilation, and occasionally terminate fatally, from the extension of the ulceration to the coats of the surrounding blood-vessels. I have seen the femoral artery opened by these ulcerations, and the patient die instantly from the hæmorrhage produced; the external iliac has been perforated in the same way.

The buboes which succeed to chancres specifically indurated are much less formidable as local diseases than the two forms just alluded to: they consist in a chain of enlarged and hard glands in one or both groins, generally in both, and in one more than the other; several glands are hard and tender, one generally more than the rest; they show no disposition to suppurate, and rarely do so. They are, literally, blind chancres in the groin, require no local measures, and are only to be dispersed by means of constitutional treatment.

CHAPTER IX.

OF CHANCRES OF THE URETHRA.

CASES of syphilitic ulcers in the urethra have been cursorily alluded to by many surgical writers. Hunter mentioned them; they are also noticed by Mr R. Carmichael in his Clinical Lectures on Venereal Diseases. The late Dr Wallace spoke of some discharges from the urethra of venereal origin which were only curable by mercury; but it has been left to modern surgical pathologists to demonstrate that primary venereal sores, precisely resembling in their nature and consequences chancres situated externally, may exist in the canal of the urethra itself, at variable points between the meatus urinarius and the bladder.

The most frequent seat of urethral chancre is the fossa navicularis. Here there is no doubt of the nature of the disease; but the chancre may be situated more deeply, where it can neither be seen nor felt, and where the only proof of its existence has been the successful inoculation of the discharge from the urethra, or the constitutional taint of which that discharge has been the only primary disease.[1]

Discharges from the urethra are due to more causes than one; and hence it is that we find Dr. Wallace saying, "that there occur cases of these discharges in which we find mercury to act in the most salutary manner; and others, again, in which the discharge will continue, and be, after a time, followed by induration and bubo, and most probably by secondary symptoms, unless this medicine be given."[2] When we consider the generally powerless effect of mercury over pure gonorrhœa, we cannot but suppose that these remarks of Dr. Wallace must refer to chancres or venereal ulcerations of the urethra, which an imperfect diagnosis has confounded with gonorrhœa.

---

[1] It is not improbable that too great prominence has been given to the fact that all discharges from the urethra followed by secondary symptoms are due to a chancre situated deep in the canal. I have elsewhere alluded to this. See a valuable paper, 'Du Chancre Larvé, ou Ulcération syphilitique primitive intra-uréthrale profonde, par Lagneau fils,—Archives Générales de Médecine,' March, 1856.

[2] Op. cit., pp. 248-9.

The symptoms of urethral chancre are, heat, itching, or irritation in the urethra, accompanied by discharge; pain or tenderness in a particular part of the urethra when it is rolled between the fingers; the presence of a distinct induration at the point where the pain is complained of; pain also increased during micturition, and referred to the same point. Discharge from the urethra occurs at various and at irregular periods after the setting in of the first symptoms already described. It is very different from the discharge of gonorrhœa; it may be sanious, bloody, or of a sloughy character, and commonly does not flow unless the indurated portion before described be pressed forcibly between the fingers.

A gentleman consulted me for a disease in the urethra, which had existed many months, and which he said consisted at first in a small sore, visible when the lips of the meatus were separated. This part had healed; but it was evident that the ulcer had extended its ravages down the urethra, since, on pressing an induration which existed behind the glans between the fingers, there escaped from the urethra a tenacious slough, precisely resembling that covering an indurated chancre in its first or ulcerating stage.

The only disease for which chancre of the urethra is likely to be mistaken is gonorrhœa. From this it is to be distinguished by the history of the case, the character and quantity of the discharge, the presence of a distinct circumscribed induration in some part of the urethra, most commonly seated in or immediately behind the glans penis. This circumscribed induration must not be mistaken for that general induration of the corpus spongiosum urethræ which accompanies acute gonorrhœa, and results from an effusion of lymph into the cells of the spongy body. This state in gonorrhœa is generally accompanied by chordee, a symptom generally absent in chancre of the urethra.

When muco-purulent discharges from the urethra continue to resist the usual methods of treatment, we may resort to the means of differential diagnosis, of testing the character of the disease by inoculation. It has been established that the inoculation of the skin of the thigh, the prepuce, or elsewhere, with the matter of pure gonorrhœa produces no result, or at best a negative one.[1] The same inoculation with matter from the urethra, secreted by a chancre in that part, gives rise to chancre. In eighty-five cases of urethral discharge, thus tested by M. Mairion, at the military hospital of Louvain, four were found of true syphilitic character, and produced chancres by inoculation; the remaining eighty-one gave no result, they were cases of simple gonorrhœa.

In some rare cases, a primary venereal sore in the urethra and gonorrhœa may be contracted by the same connection. I will mention one which seems to bear upon this point. A gentleman, fifty years of age, contracted from a suspicious connection a discharge from the urethra, which had all the characters of ordinary gonorrhœa; he placed himself under the care of an eminent practitioner, and took for a month the ordinary remedies, such as copaiba and cubebs: with this treatment the discharge disappeared. At this time a slight ulceration was perceptible round the meatus, which seemed to come from within the urethra. This spread rapidly, soon involving the whole under surface of the glans, and the urethra for an inch and a half, which were entirely destroyed by ulceration and sloughing. I was consulted on this case, which was succeeded by extensive nodes, and a pustular eruption; and what is very remarkable, the nodes were the first constitutional symptoms which occurred, an exception to the law which seems to regulate the appearance of constitutional symptoms generally. I have seen another similar case.

I believe the poisons of gonorrhœa and syphilis to be generally distinct, yet there are cases occasionally presented to our notice where both chancres and gonorrhœa exist at the same time.

It is not uncommon to see patients with external sores and a true gonorrhœal discharge from the urethra at the same time;

---

[1] See the chapter on 'Inoculation,' and the cases of 'chancres larvés,' in Ricord's work, before referred to.

neither, in the female, is it rare to see true primary venereal sores in the vulva, vagina, or uterus, coexisting with purulent discharge from the os uteri or urethra. In the male, however, more particularly, these two primary forms of disease are not curable by the same remedies. In the case I have just quoted, it appeared that the two forms of primary venereal infection existed simultaneously in the urethra at the commencement, since the symptoms of gonorrhœa disappeared under the use of the ordinary specific remedies, whilst the venereal ulcers continued to spread, and ultimately produced the most serious mutilation. We have no further proof of the opinion I have hazarded than is to be drawn from the effect of remedies, a fact to which I am disposed to attach very considerable importance.

Chancres in the urethra may be met with as a solitary form of primary venereal infection, or they may coexist with sores situated externally. It very commonly happens, also, that the presence of external sores, and the absence of discharge from the urethra, prevent any examination of the latter. In examining, however, a patient who applies with a primary venereal affection, the canal of the urethra should always be pressed between the fingers, and the lips of the meatus opened.

A gentleman contracted several small sores situated on the glans and prepuce; they were free from pain and irritation, and healed quickly under ordinary treatment: the glans, however, became swollen, red and shining, and yet there was no external symptom to account for it. On everting the lips of the meatus, a small sore was discovered, upon which the condition of the glans was evidently dependent, since it disappeared as soon as the sore in the urethra healed.

The prognosis of chancres in the urethra is not always favourable; Ricord and Vidal de Cassis have shown that by extension to the bladder they may terminate fatally. The prognosis is again unfavourable as regards the integrity of the organs of generation, since, however carefully they may be watched, severe mutilations are occasionally produced. The chief evils I have seen arise from chancres in the urethra have been the following:

1st. Contraction of the orifice of the urethra by the cicatrix of the chancre. I attended a gentleman who had a chancre of the orifice of the urethra, which, in healing, so contracted the meatus, that it would not admit the bulbous extremity of an ordinary silver probe.

2nd. Contraction of the urethra by the cicatrix of the chancre where the sore has been situated lower down. To this species of stricture the term traumatic has been applied. It does not readily yield to the bougie.

3rd. Perforations of the urethra. These are variable in extent and situation, but are commonly situated immediately behind the glans. I have said that a very common seat of chancre of the urethra is the fossa navicularis, and the glans is sometimes scooped out as it were by the spreading out of venereal ulceration in this situation. I have seen this passage behind the glans opened for an extent of an inch and a half by the ravages of an urethral chancre.

4th. The urethra itself may be completely destroyed to a greater or less extent. Of this also I have seen one example, where the passage was destroyed by ulceration for two inches, and the urethra opened on the under surface of the body of the penis.

I can conceive of nothing more horrible than mutilation of this character, which, in spite of all our care and attention, will sometimes take place, if the disease assume a phagedenic form, and spread by rapid ulceration or sloughing. They are not, however, so likely to happen if the disease has been at once diagnosticated and properly treated from the commencement. Constitutional symptoms are just as likely to occur in consequence of primary venereal diseases in the urethra, as when such sores are situated externally.

The situation of chancres within the urethra prevents the adoption of the practice recommended to be employed in primary venereal sores situated elsewhere. The use of caustics is clearly impossible, unless the sore be situated immediately within the urethra; and even then the application will require great care and attention, and is not generally to be recommended.

From the situation of a primary venereal sore in the urethra, we are prevented employing the local remedies commonly used in the treatment of chancre; and an indiscriminate course of mercury is still more useless and injurious.

The existence of chancre of the urethra being ascertained, the inflammatory symptoms are to be first subdued by a treatment appropriate to the earlier stages of gonorrhœa; diet, rest, diluents, and cathartic medicines, with emollient injections: afterwards injections with any of those lotions, properly diluted, which have been recommended in the ulcerating forms of chancre. An appropriate escharotic may be used, if the inflammatory symptoms are not too acute, and the chancre situated within reach. It is useful to introduce a small plug of lint into the urethra, impregnated with the injection employed, with the view of keeping the surfaces apart, and preventing any extension of the disease.

Mercury may be employed in chancres of the urethra with indolent indurated glands in the groin at the period and in the manner before recommended in the treatment of indurated primary venereal sores situated elsewhere.

"A man entered the venereal hospital, said to have suffered from gonorrhœa for twelve months, in the treatment of which copaiba, cubebs, and various astringents had been vainly employed by a variety of surgeons. The discharge, from the patient's account, had never been very profuse; on pressing the urethra firmly there hardly issued some drops of pus. The glans was considerably swollen, and its summit the seat of an induration the size of a nut, surrounding the meatus. On separating the lips of the orifice, a large chancre was discovered, which had burrowed itself deeply into the parietes of the canal. This patient had been submitted to several mercurial courses without benefit, because (says M. Cullerier) the local treatment of the sore had been neglected. All internal treatment was now suspended; a strict dietetic regimen and repose were directed to be observed, and leeches were applied from time to time. In the intervals, a piece of lint, covered with opiate cerate, was kept in the urethra; emollient fomentations were frequently used, and the penis enveloped in a poultice. Under the influence of these remedies the inflammation disappeared, the sore became clean, and a few applications of the nitrate of silver were sufficient to effect a cure."

Case XIII.

R. M., aged 29, contracted, from the same connection, sores on the penis and a running from the urethra, seven years before. The ulcers on the penis were cured, very likely by a mercurial course, as the patient has been repeatedly salivated. The treatment which cured the external sores had no effect upon the discharge from the urethra. This continued; it has been repeatedly treated, but never cured. Soon after this, scaly blotches appeared on the forehead and other parts of the body, which disappeared under medical treatment. Disregarding the discharge from the urethra, which never disappeared, and fancying himself well, our patient now married. His first child died a few months after birth, covered with blotches: a second and a third child shared the same fate, and died under the same circumstances. The wife also had sores and bloody discharge from the vagina, and blotches on the body, the husband still having no affection except the slight running from the urethra, which sometimes attracted his attention, and at others was totally disregarded.

During these periods, R. M. had at several times fresh constitutional symptoms, for which he underwent a variety of treatment, but was never free from the running from the urethra. In November, **1843**, between six and seven years after the contraction of the primary disease, he came under my care as a patient of the Queen's Hospital. He was then in the following state: The head and face were covered with foul blotches, which consisted of incrustations or scabs, concealing deep, irregular, and ill-conditioned ulcers; there was superficial redness of the fauces, but no ulceration at this time; he was feeble and emaciated from long-continued disease. The skin disease was evidently pustular in its commencement, as one or two fresh-formed pustules were on the face: these pustules were situated on an inflamed base, and, when they broke and discharged, ran into ulcers, covered with flat or conical crusts, thus constituting a variety of disease to which the term "pustulo-crustaceous" has been applied.

He denied at first having anything the matter with the genitals, but, on closer questioning, admitted that he had a running so slight as to be hardly worthy of notice. On examination, I perceived a sanious oozing from the urethra, very different from that which characterises chronic gonorrhœa or gleet. About an inch from the meatus, immediately behind the glans penis, existed a circumscribed induration, about the size of a hazel-nut: this was painful when pressed between the fingers, and the pressure occasioned some blood and portions of white tenacious sloughs to issue from the urethra. On separating the lips of the meatus urinarius, by means of a small speculum made for the purpose, the commencement of ulceration, which appeared to extend deep into the urethra, could be perceived.

This case is remarkable under many points of view. In the first place, the disease itself (primary venereal sore in the urethra) is not of every-day occurrence, although I have seen many instances of it; again, the time which the sore has existed is remarkable. There is no evidence that R. M. had ever contracted a venereal disease subsequent to his marriage; the evidence of the wife and himself is conclusive upon this point. The sores which he contracted at the same time with the running were cured previous to his marriage, the running still remaining; some days he perceived none; yet having no other disease than that in the urethra, we observe the wife becoming diseased, and three children dying, with unquestionable venereal affections.

This case is one, then, of primary venereal sore in the urethra, contracted at the same time with external primary sores. The primary sores were healed, but the urethral sore remained uncured, and, marrying in this state, his offspring all die diseased, and his wife also is affected.

The patient has had repeated attacks of constitutional disease in the most alarming forms, which have recurred as often as they have been cured; and this I explain by the sore in the urethra being still open and poisoned, and thus forming, as it were, a well of poison, which was constantly tainting the system.

It is proved by the history of this case, then, which has been very carefully watched and examined, and the history very correctly taken, that primary venereal sores may exist within the urethra for a long period of time. M. Cullerier has recorded a case of this nature, which had, when presented to his notice, continued upwards of a year, and was then uncured, although the patient had been submitted to repeated treatments. These sores may be seated in any part of the urethra, and even in some rare cases extend to the bladder itself.

CASE XIV.

Thickening and contraction of the urethra, from the cicatrices of venereal sores situated in the fossa navicularis; chancre of the fossa navicularis.

R. T. came to consult me respecting what he termed an obstruction in his urethra; he gave the following history of his case:—About eighteen months ago (September, 1843), shortly after a suspicious intercourse, he perceived a slight discharge from the orifice of the urethra, from which there issued some drops of pus; on separating the lips of the urethra he perceived within them a small sore. He applied to a druggist, who furnished him with an ointment which irritated the sore and made it worse. Some time after this, a surgeon was consulted, who recommended mercury; this was taken till salivation was produced. The sore, however, did not amend under its use; it was still to be perceived when the urethra was examined, and the same discharge of drops of pus continued.

He consulted, some time after this, a second surgeon, who cauterised the sore daily with the nitrate of silver; this produced hardness of the glans penis, and discharge of sloughs and blood from the urethra. This state of things continuing, the patient began to lose confidence in the mode of treatment, which he abandoned, and, three weeks after the last application of the caustic, he consulted me. Copper-coloured spots made their appearance on several parts of the body, the arms, and trunk, at this time.

When the patient pressed the urethra forcibly between the fingers, he brought from it a thick tenacious slough, exactly resembling that which covers a chancre in its first or ulcerating stage. The under surface of the glans penis was red and inflamed, and, when this part was examined between the fingers, a considerable induration was perceived, which appeared to exist in the lower part of the fossa navicularis, just within the urethra. When this induration was pressed, there issued from the urethra pus, sometimes mixed with blood, and at times tenacious shreds or portions of sloughs similar to those already spoken of. I examined the interior of the urethra for an inch and a half or more, with a small speculum made for the purpose. A white smooth cicatrix occupied the whole of the fossa navicularis on its upper part and sides; I could not obtain a clear view of the bottom of the fossa, where I believe ulceration still existed. This I inferred from the induration, the redness opposite this part, and the character of the discharge forced from the urethra when the induration was pressed between the fingers.

There were no constitutional symptoms in existence either in the throat or vicinity of the anus; some copper-coloured blotches only occupied the arms and legs. In primary venereal sores of the urethra, the local treatment is a main point to be attended to. I recommended the patient to inject the urethra three times a day with tepid olive oil, and in the intervals introduced into the passage a thin shred of soft lint soaked in a solution of tannin and extract of opium.[1] The lint was kept constantly in the urethra, merely being removed when the patient wished to make water. The patient was also directed to take one grain of the iodide of mercury with three of the extract of conium, in a pill, every night, and to be strictly regular in his mode of life. With very slight modification in the mode of treatment at first laid down, this case was brought to a successful issue; the induration and discharge disappeared from the urethra, and the copper-coloured blotches from the body. There

[1] ℞ Tannin, gr. x;
Ext. opii pur., gr. ij;
Aquæ, ℥j. M. ft. lotio.

remained some contraction of the urethra, produced by the first cicatrix, which was materially relieved by the bougie. This constitutes what has been termed by some writers "traumatic stricture," very commonly produced by the cicatrices of primary venereal sores thus situated, which, when they do not actually contract the urethra, partially destroy its elasticity, and produce many troublesome symptoms, more particularly a dribbling away of the urine for some minutes after the patient has done making water. This constitutes a species of incontinence of urine whose cause is to be sought for, not in the bladder, but in the urethra.

CHAPTER X.

OF PHAGEDENA.

INSTEAD of following the regular course, the primary ulcer assumes a character of rapid ulceration or sloughing, to which the term phagedena is applied. Phagedenic ulcers assume various forms: sometimes they are intensely painful, the surface covered with a tenacious yellow slough, the edge red and hard, and the surrounding integuments little or not at all affected. This species of sore spreads rapidly by ulceration, and if not arrested frequently occasions fearful mutilation.[1] Soft or simple chancres frequently assume this character at the commencement, without any evident cause; but it is again a secondary condition, produced by the habits or constitution of the patient, the injudicious exhibition of mercury, or improper local treatment. Either a primary or secondary syphilitic ulcer may become phagedenic: hence there are two kinds of phagedena, primary and secondary. Primary ulcers may assume a phagedenic appearance from an excess of local inflammation; in such cases the penis is lividly red, much swollen, and the sore itself covered by an adherent dark parti-coloured or black slough. With these local conditions the constitution of the patient sympathises more or less; there is, in some cases, smart symptomatic fever, the pain prevents sleep, and there are profuse night perspirations.

---

[1] This is ulcerative phagedena, and it is a condition into which simple chancres frequently degenerate; it also attacks those ulcers which succeed to a bubo which has suppurated specifically. It is a simple, slow, destructive ulceration, in which the edges of the chancre are thick, jagged, overhanging and irregular, and its surface red, shining, and without granulation. I have seen two instances in which these ulcerations have continued, one for twelve, the other for eighteen months.

In many cases no positive cause can be assigned.[1] I have seen phagedena in persons previously very healthy. Desruelles, in the true spirit of Broussaism, attributes it to irritation of the viscera, a chronic gastritis, or gastro-enteritis. Ricord believes, also, that there is commonly an accompanying visceral irritation, but thinks, also, that a cold damp atmosphere disposes primary sores to become phagedenic. Mr Mayo states that "what gives the phagedenic character to sores on the genitals after infection is some peculiarity of the general habit." This is perhaps true, but the difficulty is to know in what this peculiarity consists.

Primary phagedena is most commonly seen in soft chancres situated on the penis, and the ulcerative form is here the most common; the ulcerative stage of the chancre goes on unchecked by remedies, and the ulcer becomes phagedenic. This form of disease is particularly liable to occur at the orifice of the urethra; it commences in the fossa navicularis; the glans penis is red, shining, and swollen; a sanious discharge issues from the meatus, and a white ring soon surrounds it; the ulcerative process soon extends over the whole glans. Mutilation can hardly be prevented in such cases; for to however a trifling extent the substance of the glans may be destroyed by ulceration, it is never repaired: the ulcers may cicatrise and heal, but the loss of substance is not restored. On everting the lips of the meatus in such cases, a white slough may be seen covering the whole surface brought into view. It is in the phagedenic ulceration of the soft chancre that M. Ricord has recommended the potassio-tartrate of iron. I have had ample experience of its beneficial effects, but it is by no means a specific in such states.

The treatment of phagedena is local and constitutional. The first indication is to arrest the process of ulceration, whether this be done by local or constitutional measures, by escharotics of various kinds locally, or by bleeding, tartar emetic, opium, or mercury, as constitutional remedies.

One of the most apparently feasible means of arresting the ulcerative process is destruction of the whole surface of the sore by caustics, such as strong nitric acid, the acid nitrate of mercury, or the other remedies described as applicable to the abortive treatment of chancre. The sore must then be covered with pledgets of lint soaked in warm olive oil, or strong decoctions of poppy, or aqueous solution of opium.[1] Although this may be practised in some forms of phagedena, there are others in which it is inadmissible or positively injurious. In sores characterised by great irritability caustics are hurtful, and in those marked by great inflammatory action this must be subdued before they are used; they may then be employed, if necessary. In these varieties of phagedena a purely antiphlogistic treatment, with anodyne fomentations, is the safest practice, leaving the application of caustics till the inflammatory action has been in some measure subdued. As local applications to very irritable ulcers of this kind I have found the unguent. zinci with opium answer very well where all other applications have failed.[2] As a detergent for sloughy sores, or after the acid has been used, one of the best applications is composed of equal parts of balsam of Peru and castor oil.[3]

---

[1] Phagedena occurs commonly in persons who consume large quantities of spirits and ale; just in the same way that simple wounds become gangrenous in persons of similar habits.

In forms of primary phagedena attended by severe pain, the chief reliance is to be placed upon opium, with or without tartar emetic; conium, hyoscyamus, and other sedatives may be employed, but the most certain remedy is the first; this may be combined with sarsaparilla in conjunction with the iodide of potassium, the mineral acids with bark, or the cold infusion of sarsa in lime-water.[4] In the inflammatory forms, general bleeding may be indicated; but, except in extreme cases, I do not approve of this practice. I prefer low diet and tartar emetic as a means of reducing inflammation. It must be remembered, also, that we have to deal with a specific and not a common inflammation, and as I have already remarked, when speaking of the inflammatory forms of gonorrhœa, that the inflammatory symptoms do not in all cases yield to antiphlogistic treatment, we debilitate the patient very often by them, and do not ameliorate the disease. There are cases in which the degree of inflammatory action accompanying a primary syphilitic sore is not a positive contra-indication to the use of mercury. Dr Wallace had already remarked this, and founds his opinion on the value of mercury freely exhibited in syphilitic iritis, and upon the fact that mercurial fumigations, in certain destructive sores of the throat, are very frequently beneficial, though attended by great inflammatory action.[1] No remark can be more correct. The records of cases treated under my care in the Queen's Hospital afford abundant evidence of this, and I think the following rule laid down by Dr. Wallace of extreme value: "that although that form of inflammation which supervenes when a patient is under a mercurial course is sure to be aggravated by persisting in the use of mercury, the remedy will powerfully assist to subdue inflammation which commences under different circumstances."

---

[1] Caustics are sometimes utterly inefficient in averting the ravages of phagedena.

[2] ℞ Unguent. zinci, ℥jss;
Pulv. opii, ʒij. M.

[3] Mr Cock, of Guy's Hospital, recommends constant irrigation with tepid water. Many successful cases are recorded.—'Medical Times and Gazette,' April 17th, 1856.

[4] ℞ Rad. sarsæ, ℥iv;
Rad. glycorrhizæ, ℥j;
Liquoris calcis, Oij.
Macera per horas xxiv. Cap. poculum magnum ter die.

In those forms of phagedena which are characterised by a black slough, the sloughing phagedena of British surgeons, the gangrenous phagedenic chancre of the French, mercury is wholly inadmissible; the disease is to be treated on the principles which should regulate us in the management of similar diseases not syphilitic. It must be recollected, however, when the sore has been brought to heal by proper remedies, that it has had a venereal origin, and perhaps has succeeded to a regular primary sore, rendered gangrenous by irregularities and bad treatment, and therefore that it may be followed by secondary or constitutional symptoms.[2]

---

[1] In secondary phagedena of the throat and fauces, I have rarely found the treatment by mercurial vapour fail; during its use the patient must live well, and take the iodides of iron, potass, soda, or ammonia, with or without bark.

[2] In the gangrenous forms of phagedena, covered with black sloughs, where the junction of the diseased with the healthy skin is marked by a red,

It will be evident from what has been said, that mercury is not to be generally employed in phagedena; although there are cases in which its use may be beneficial, and these are chiefly where all other ordinary means have failed in arresting the extension of ulceration; when it is indicated, the method *par excellence* is that by fumigation. The other remedies consist of venesection, and tartar emetic;[1] in the inflammatory forms the dilute nitric acid, or the nitro-muriatic acid, or the hydriodate of potass with bark, or sarsaparilla. In the way of local treatment in certain cases, no applications are better than strong nitric acid, the acid nitrate, or the per-nitrate of mercury, "used freely to the sore, and repeated till a clean vascular surface comes into view." The first or second application is not attended with considerable pain, as the disorganised surface tends to protect the more sensitive parts underneath; but as the slough becomes detached, the pain is increased on each successive application. If the slough be reproduced, it may be dressed with equal parts of balsam of Peru and castor oil.[2]

Secondary venereal ulcers sometimes assume a phagedenic character. Secondary phagedena, however, is chiefly met with in the throat and fauces in bad constitutions, or constitutions broken down by bad living, long-continued disease, or improper treatment. To these we shall return, when speaking of secondary syphilis.

---

inflammatory ring, caustics are wholly inadmissible; this is gangrenous phagedena from excess of inflammation; the line of treatment generally suitable consists of charcoal poultices, with large doses of opium and tartar emetic; supporting the system with porter, wine, and bark.

[1] Carmichael's Antimonial Solution:

℞ Antim. tart., gr. iv;
Tinct. opii, ʒj;
Tinct. card. co., ℥ss;
Syrup., ℥ss;
Aquæ fontanæ, ℥vij. M.

Administered in the simple or compound decoction of sarsa, in primary venereal ulcers, where much inflammation is present; also in the earlier stages of all syphilitic eruptions.

[2] Egan, on Primary and Secondary Phagedena, 'Dublin Journal,' January, 1845.

CASE XV.

Phagedena of the body of the penis, spreading by rapid ulceration; failure of ordinary treatment; cure by mercurial fumigation.

A young gentleman, of delicate constitution, aged 22, contracted a sore on the body of the penis. It appeared first as a pimple, but rapidly ulcerated and spread. I saw this patient seventeen days after the first appearance of the ulcer. It was then as large as half-a-crown, covered with a tenacious yellow slough, the edges hard, elevated, and red, but no characteristic induration. The pain from the ulcer was most severe, its surface very sensitive; the patient could not sleep, and was tormented with profuse perspirations. Various local remedies were tried without effect; the irritability and sensitiveness of the sore were so great that I feared to use caustic to avert the spread of the ulceration, which increased daily. The only local remedy which could be borne was the unguentum zinci with powdered opium. For twelve or fourteen days I kept this patient in bed, and gave him large doses of conium with opium, sarsa with nitric acid, &c., with very little, or I may say no good effect. The ulceration continued to extend, and threatened to involve the whole integument of the penis. I now resorted to the moist mercurial fume. I placed him in a strong bath, in which he only remained ten minutes, the pain produced was so great, and when he was removed he fainted. On the next day the ulceration had not spread; the bath was again used, with less pain; on the third day there was no pain, and one or two healthy spots made their appearance in the centre of the slough which covered the sore, and the edges were less hard. After the fifth bath, the ulcer was covered with healthy granulations, and very shortly healed. The gums were very slightly affected.

CASE XVI.

Indurated phagedenic ulcer of the glans penis; failure of ordinary treatment; cure by mercurial fumigation.

A commercial gentleman, very healthy, 28 years of age, contracted a sore on the under surface of the glans penis, near the frænum. I did not see it till the third week of its existence, during which period the patient had pursued his usual avocations, and used various local remedies. When I first saw this case, there was a deep burrowing ulcer involving the whole under surface of the glans, having destroyed the frænum, and extended to the integument on the under surface of the penis; this ulcer was covered with a tenacious slough, black in some places, white in others. The glans penis itself was swollen and much inflamed, and the whole body of the penis was in a similar condition. The patient was now confined to bed, placed on a low diet, the parts enveloped in a bread poultice, and aperients, with nauseating doses of antimony, exhibited. In two or three days, the ulcer continuing to spread, I destroyed the whole surface with the acid nitrate of mercury, and after the separation of the eschar, no improvement having taken place, I did this a second time. The slough was again reproduced, the ulcer still spreading, and threatening to open the urethra; a circumstance I have seen more than once consequent upon ulcers in this situation. It is to be remarked also that the general inflammation in the glans and penis were very little reduced by the rest, diet, and antiphlogistic treatment. I now resorted to the mercurial fume. The patient was immersed daily for forty minutes; there was no extension of disease after the second bath. At the end of eighteen days the sore had healed without induration, leaving, however, an excavated cicatrix on the glans. The mouth was moderately sore. Profuse night perspirations also accompanied the ulcerating and sloughing stages.

CHAPTER XI.

OF CHANCRES AND ULCERS IN THE FEMALE.

What has been already said at pages 109 and 110, on chancres and non-specific ulcers in the male, finds also its application here, especially in reference to sores situated on the external parts of generation.

Primary venereal ulcers in the female are most commonly seated on the external parts, as the labia majora, the nymphæ, the folds of mucous membrane surrounding the clitoris, at the orifice or other parts of the vagina, or at the meatus urinarius.

Ulcers, yielding a characteristic pustule by inoculation, are rare on the neck or at the orifice of the womb; although ulcerations, unquestionably syphilitic, are by no means uncommon in this situation.

Primary venereal ulcers, as we observe them on the external parts of the organs of generation, are rarely found on the neck, on the lips, or in the canal of the cervix uteri, yet they have been found in all these situations. I can only find one case on record where an ulcer of the uterus yielded a positive result when tested by inoculation, and this is mentioned by M. Ricord, at page 212 of his 'Treatise on Inoculation.' Another case is given, by the same surgeon, at p. 11 of his 'Iconographie,' and figured in the fifth plate. Here the ulcer was single, and its existence suspected from two persons having contracted chancres from the subject of it. No account is given of its having been inoculated artificially, and therefore I conclude that no test of this kind was instituted. It is described as "a round ulcer, with well-defined and sharp edges, and an ash-coloured surface, surrounded by a red areola or border."

A man was admitted, under my care, as an out-patient at the Queen's Hospital, some time ago, with several soft chancres round the corona glandis. He said the disease had been given to him by his wife, who was suffering from syphilis when he married her, and soon after this event the disease under which he laboured broke out. He brought his wife with him for examination.

On the lower lip of the cervix existed a deep ulcer with sharp edges, surrounded by a well-defined inflammatory patch; the ulcer appeared to run into the canal of the cervix. I never saw anything more closely resemble a chancre, yet it produced no result when inoculated.

Dr Whitehead, at page 367 of his treatise on 'Abortion and Sterility,' says: "I have seen but one case of this kind. The husband had orificial chancre with gonorrhœa, which were contracted about three months after marriage. His wife had *no external sores;* she had constitutional syphilis. The ulcer occupied the boundaries of the orificium uteri to the extent of a sixpenny piece; it had lost its primary character, as far at least as the infecting power of its secretion was concerned, as no result was obtained by inoculation of the matter on the skin; but it still retained a genuine chancrous appearance, having an excavated centre with raised overhanging margins and a yellow base."

A girl was admitted into the Queen's Hospital, under my care, in August of last year, with a syphilitic eruption, a well-marked "lichen corymbosus." On examination of the uterus, a large well-defined ulcer was discovered on the lower lip, which ran into the canal of the cervix. It was surrounded by a ring of inflammation. The remaining portion of the mucous membrane was healthy, and contrasted strongly with the diseased one.

Nothing appears more likely to happen than inoculation of the uterine surfaces, when the male has chancre of the urethra. The comparative frequency of this may be seen from an examination of the work of M. Fournier, who, out of 824 cases in which the seat of chancre was noted, found 32 of the meatus urinarius, and 20 seated within the urethra, which could not be seen till the lips of the urethra were opened.

The latter belong to the class of concealed chancres, or "chancres larvés," as they are termed by the French pathologists. Such ulcers in the female may be seated within the canal of the cervix, and thus bear a strong analogy, as far as their situation is concerned, to those placed within the urethra of the male. The 17th case narrated by Dr H. Bennet, in his treatise on 'Inflammation of the Uterus,' appears to have been one of this kind. It occurred in a female, who had communicated to her lover a chancre and a bubo; and these circumstances led to an examination of the vagina and uterus. No trace of disease could be discovered, except a profuse puriform discharge from the vagina, and a muco-pus which issued from the os uteri. On the third examination with the speculum, "a small ulceration was discovered issuing from the os uteri, and turning over the anterior lip. The ulceration presented a greyish surface and an irregular indurated margin; it was deemed to be a true chancre by M. Emery, as well as by Dr Bennet, and many other persons who saw it." (Bennet, 'On the Uterus,' p. 442.) This case is narrated by Dr Bennet as one of chancre concealed within the cavity of the os uteri for several weeks, the first symptom of which was the discharge of muco-pus from the uterine orifice.

It will be remarked, in the two cases I have mentioned from my own observation, that both the ulcers which I thought might be primary, turned into the canal of the cervix. They might have commenced there, as the cases were not examined till disease had been in existence some time.

It is very probable that the concealed chancre of the canal of the cervix may be a more frequent affection than is generally supposed; for it is not uncommon to see females with secondary syphilis, who have had no external sores, but who complain merely of discharge more or less profuse. On examining these cases with the speculum, a thick muco-pus is found to issue from the os uteri, which may or may not be symptomatic of concealed chancre of the canal of the cervix.

From what has been already said, it will again be observed, that although in one instance only, and that of a sore situated on the external portion of the neck of the uterus, could a successful inoculation be produced; still three of the females mentioned produced chancres in the persons with whom they cohabited, and yet had no external sores; they presented no other marks of primary syphilis than those which were found on the uterus.

In addition to the cases of presumed chancre of the canal of the cervix uteri which I have already mentioned, M. Robert has cited four cases of discharge from the os, which yielded a characteristic pustule when tested by inoculation ; from this fact it was believed that such discharges were symptomatic of chancre situated within the canal of the cervix uteri. There was no external trace of ulceration, and the successful inoculation of the pus discharged was the only symptom which led to the suspicion of the existence of such chancres. (Quoted from a paper by Dr Achille Dron, in Diday and Rollet's 'Annuaire de la Syphilis, &c.,' p. 220.)[1]

---

[1] What has already been said as to the treatment of chancres in the male, both constitutionally and locally, finds also its application here. If caustics be used to ulcers situated deeply in the vagina or in the uterus, they must of course be applied through the speculum : the best and safest caustic to uterine ulcers is the liquor hydrargyri pernitratis ; care must be taken in applying it that none drop on the healthy portions of the vagina ; a small pledget of lint should be placed over the ulcer after the application of the caustic.

See also the chapter on Secondary Syphilis of the Uterus.

CHAPTER XII.

OF BUBO.[1]

I HAVE already made some remarks on bubo, or adenitis, in connection with primary sores. (See page 130.) Bubo may follow gonorrhœa, balanitis, or other non-specific diseases; it is then a mere glandular inflammation, a simple adenitis, and in such case in no respect specific disease. Again, a bubo may follow a soft chancre, and here a gland in one or both groins may become inflamed from a variety of causes non-specific; in such case, either the inflammation in the gland is arrested by treatment and the swelling dispersed, or the disease runs on to suppuration, and the pus which is discharged is of a non-virulent character. The buboes, however, which succeed to soft chancres are commonly produced by the absorption of a specific pus from the chancre itself; the gland suppurates, and an ulcer in the groin succeeds; which is then a glandular, or inguinal chancre: this is a specific or virulent bubo; or, as it has been termed, the bubo of absorption. The virulent bubo is later in appearing than the inflammatory bubo; frequently it does not occur till after the chancre which produced it has been some time healed; even when a chancre remains long open, the bubo is not quick to develop itself. A third kind of bubo succeeds to or accompanies an indurated chancre, consisting in a chain of indolent glands, which swell in one or both groins; these buboes have no tendency to suppurate. All these varieties of buboes have a distinct dependance upon a primary lesion which has produced them; but the glands in the groin sometimes inflame and suppurate after suspicious intercourse, without any primary lesion elsewhere having preceded such an occurrence. This is a primary bubo, not a consecutive one; it is the "bubon d'emblée," about which there has been so much discussion.

---

[1] Adenitis.

The bubo which has been termed primary, or "d'emblée," which arises after promiscuous intercourse, and has not been preceded by either a discharge from the urethra, a sore, excoriation, crack, or fissure, on the genital organs, may be, but commonly is not venereal.[1] It is very commonly due, in young persons especially, to over-sexual indulgence, or violent exercise during coition; of this I have seen many instances. This is clearly not a primary virulent bubo, produced by the absorption of any special virus, but an ordinary adenitis due to an evident cause. I have never seen a case of primary bubo which has been tested by inoculation, and thus proved to be of a syphilitic character; my experience on this point is supported by Dr Egan.[2] Such cases have, however, been seen and verified by some modern surgeons of credit and experience, and, therefore, we can hardly doubt the existence of such buboes, although they must of necessity be rare.[3] Inguinal buboes again frequently form in constitutional syphilis, from the irritation produced by or the matter absorbed from secondary ulcerations, or condylomata, on the scrotum, penis, the lower part of the abdomen, or the vicinity of the anus. Chancres situated on the fingers or hands produce buboes above the internal condyle of the humerus, or in the axilla, or in other places on glands situated on the course of lymphatics, in connection with a chancre, wherever it may be placed.

When a bubo has suppurated, the pus which it has discharged, or that found at the bottom of the ulcer, may be tested by inoculation. I have already shown why buboes are much more rarely successfully inoculated than chancres. The virus is modified or diluted in its passage through the absorbent vessels and glands by the contents or secretions of these parts. (See page 31.) This is evidently the true explanation why inoculation is not a certain test of the true nature of a bubo. Even M. Ricord admits that inoculable pus is never met with beyond the first glands in connection with chancres. (Letters, by Stapleton, p. 44.) "Whilst, therefore, I admit that this test, when applied to the inguinal glands, will in many instances serve to distinguish the nature of bubo, I cannot concur in the conclusion at which M. Ricord arrives when he states that inoculation in bubonic enlargements may be relied on as forming an unexceptionable and pathognomonic sign." (Egan, op. cit., p. 22.)[1]

---

[1] M. Ricord now denies the existence of primary bubo. (See Letters by Stapleton, p. 42.) One is at a loss to understand this, when M. Ricord says, in his 'Traité des Maladies Vénériennes,' p. 149, there are cases where it is impossible to discover any suspicious antecedent, and we must consequently be compelled to admit the "bubon dit d'emblée."

See also the 26th and 27th Letters, 2nd edit., Paris, 1856, in which the occurrence of the "bubon d'emblée" is still resolutely denied.

[2] Syphilitic Diseases, &c., p. 24.

[3] See Vidal (de Cassis), 'Traité des Maladies Vénériennes,' pp. 201-3.

Two cases where primary buboes were successfully inoculated are recorded by Mr Lane in Dr Blackman's Translation of Vidal, American edit., p. 237.

The causes of bubo, or of adenitis, are various: besides syphilis and gonorrhœa, they frequently arise from excessive indulgence with a healthy female, from fatigue, jumping, swimming, skating, long journeys on foot, sudden and violent exertion, or from ulcers situate upon any part of the lower extremities; also from piles, ulcers, or condylomata in the vicinity of the anus. Any stimulus acting for a longer or shorter period of time upon the inguinal glands, is liable to be followed by simple inflammatory bubo. A strumous diathesis is a frequent cause of bubo. This form of bubo occurs where syphilis is complicated with other diseases, such as albuminuria, phthisis, or a general cachectic, strumous, or bad habit of body. In such cases, the enlargement of the glands arises slowly; the tumour is lobulated, puffy, and uneven, affecting the glands on both sides, in the femoral frequently, as well as in the inguinal region; it remains long indolent, or suppurates imperfectly, discharging a badly-formed pus, the abscesses running frequently into troublesome sinuous ulcers, surrounded by much induration. The use of caustics (the advocates of cauterisation admit that an imperfect cauterisation frequently causes a bubo) or irritating dressings to primary sores, occasionally cause a bubo, though this does not affect the general question of the utility of caustics under such circumstances. The cases are rare, but still this must be admitted as one of the occasional causes of bubo.

---

[1] See also Fabre, 'Bibliothèque du Médecin Praticien,' tom. vii., p. 224.

When we perceive a stiffness in the groin when the patient walks, accompanied with tenderness on pressure, and a glandular swelling, during the period a soft chancre is open, and in its ulcerating stage, or at various periods more or less remote after it has healed, we may be sure a bubo is about to form, and an attempt should be made to avert the disease at this period, although such attempts may not always be successful.

It is of great importance to the patient that a bubo should be dispersed, if possible, and not suffered to suppurate, the latter process leading to a long and troublesome affection, fraught with endless inconvenience, pain, and even danger. An abortive treatment has been attempted here, as well as in gonorrhœa and chancre, but, as in these diseases, with an uncertain success. In the first stage of bubo, if much inflammation, pain, or tenderness be present, rest, with local bleeding, blisters, tartar emetic, and the application of ice or cold evaporating lotions, are the appropriate remedies. If the inflammatory symptoms are not marked, and the bubo be indolent, rest and compression alone may be resorted to. It has been remarked that patients wearing trusses seldom have a bubo form on the side where the truss presses; hence, in the first stage of bubo, that of simple enlargement, without much inflammatory action or pain, a well-regulated pressure is frequently successful in dispersing the tumour. It must be associated, however, with rest and an antiphlogistic regimen.

When the commencement of bubo is accompanied by much pain, tenderness on pressure, or heat of parts, the local abstraction of blood may be necessary. In local bleedings thus employed, it will be found advantageous to apply a small number of leeches, from four to eight, or more, and wait till the oozing of blood begins to cease, then to apply another relay of leeches so as to keep up a constant draining of blood from the part for twelve or more hours. This form of bleeding, termed "permanent," is found to reduce the inflammation more certainly and speedily than the application of a large number of leeches at once. Two, three, or more relays of leeches may be thus employed, proportionate to the strength of the patient and the intensity of the local disease.

After the inflammatory symptoms have subsided, pressure may be made upon the enlarged gland by means of plasters, over which may be placed a pad and a bandage. These plasters should be spread on soft thick wash-leather, and laid on parallel to the thigh. Plasters composed of belladonna, lead, iodine, or mercury are to be preferred.[1]

If the bubo be a simple non-specific adenitis, we may probably succeed in dispersing it by these means. Should it be a virulent bubo, produced by the absorption of a specific pus, we shall almost certainly fail. Frictions with ointment composed of the iodides of lead[2] or a solution of iodine[3] are useful in dispersing the chronic enlargements caused by an inflammatory bubo.

When fluctuation is evident, more particularly if the skin covering the tumour be thin, it will generally be useless to lose time in attempting longer the resolution of the tumour. It will, as a general principle, be better to open it at once, either with caustic or the knife.

The bubo may have suppurated freely, and the collection of matter be large, and the surrounding tissue little indurated; or there may be much surrounding induration, and the collection of matter small and deep-seated. In all cases the best general rule of practice is to open the bubo as soon as fluctuation is evident; and this should be done at its lowest or most depending portion. When a bubo is ready to puncture, it is not advisable to make too free an incision; when this is done, there is a quantity of integument on the edges which will not unite with the surface of the sac thus produced. By opening the bubo in this way, the whole anterior wall of it is more or less destroyed, and the cure must take place by the cicatrisation of a granulating surface which springs from the floor or posterior wall of the abscess. The objects to be obtained are, the evacuation of the matter; to diminish the disposition of its re-formation; and to procure union of the two sides of the cavity. This may be done by making several small punctures in the lowest part of the integument with a fine bistoury; through these the matter will ooze out till the abscess is empty. Through one of the apertures the point of a fine syringe may be introduced, and a very weak solution of the sulphate of zinc injected: when the abscess is empty, a compress of lint should be placed over it, and moderately tight pressure made by means of a bandage. By these means a partial or complete adherence of the sides of the bubo is obtained, and a speedy cure is the result; in some instances this may not be the case, but by daily use of the injection through one of the punctures, which should be kept open for that purpose, a cure may generally be effected in a reasonably short space of time. If the skin be thin and the collection of matter large, the bubo may be opened with a fine seton, containing four or five threads, or one or two silver wires; the seton should be passed in the axis of the bubo, and suffered to remain two, three, or four days, according to circumstances. One of Chassaignac's fine drainage tubes would answer in such cases very well.

---

[1] For this purpose may be employed the "Emp. Ammoniac. c. Hydrargyro" of the London Pharmacopœia, the Emp. de Vigo, of which I have already given the form.

Or,

℞ Emp. belladonnæ, pts. viij;
Plumbi iodidi, pt. j. M.
℞ Emp. "de Vigo" c. mercurio, pts. iv;
Emp. belladonnæ, pt. j. M.
℞ Emp. belladonnæ, ℥iv;
Iodinii, ʒj. M.
℞ Emp. hydrargyri, ℥iv;
Iodinii, ʒj. M.

[2] ℞ Ext. belladonnæ, ʒij;
Ung. plumbi iodidi, ℥j. M. ft. unguent.

[3] ℞ Iodini, ℈j—ʒss;
Potass. iodidi, ℈ij—ʒj;
Gum. mastiche, ℈j;
Sp. vini, ℥j. M.

To be applied with a camel-hair pencil night and morning.

When the integuments covering a bubo are of a deep blue colour, more or less disorganised, or threatening gangrene, it is better to open the abscess with the potassa fusa, or some other caustic, than by simple incision. Where it is impossible to save the integuments, from their thinness and the degree of disorganisation which they have undergone, Desruelles and Wallace prefer opening the abscess with caustic; the surface of the skin is to be destroyed by the potassa fusa, or other appropriate escharotic, to the proposed extent, and the next day a puncture made with the lancet in the centre of the slough thus formed. Where, however, it is probable that the integuments may be saved, the nitrate of silver is to be rubbed "on the surface of the bubo, and of the surrounding diseased skin, previously moistened with tepid water, until the cuticle is rendered of a bluish colour to the extent of an inch beyond the diseased integuments covering the tumour." On the following day, a puncture is to be made in the thinnest part of the integuments, and a compress and roller are to be applied. When the surface of the cuticle has become dry after the first application of the caustic, it may be reapplied over the integuments as before. This local treatment, recommended by Dr Wallace, almost universally succeeds in causing the sides of the abscess to agglutinate and the external wound to heal.[1]

What I have just said refers more especially to the treatment of non-virulent bubo: the course pursued by a virulent bubo is very different; whether this be suffered to break of itself, or whether it be opened by one or more punctures, the openings thus made ulcerate, and assume the form of soft chancres in their ulcerating stage. Every puncture may become a separate sore. These ulcerations continue to spread for a longer or shorter period before cicatrisation commences; they very often become phagedenic, and spread fearfully by rapid ulceration or sloughing. They are to be treated precisely on the principles laid down for the management of soft chancres both locally and constitutionally. Caustics in some cases find their application here, used with the intention of converting a specific sore into a simple one. Where the surface is extensive, they are contra-indicated; and in many cases they fail in destroying the phagedenic character of the sore. The local applications mentioned when speaking of the soft chancre are useful; with bark, iron, the nitro-muriatic acid, and as a last resource in cases stationary and perfectly chronic, mercury in the form of vapour or otherwise. (See the chapter on Phagedena.)

---

[1] Wallace, pp. 377-8.

The open or ulcerated bubo may assume many morbid conditions which prevent its cicatrisation. In the first place, the inflammation which the absorption of the venereal poison has occasioned in the glands of the groin, and which has terminated in suppuration, may continue to be violent after the pus has been evacuated; and hence, one obstacle to the cicatrisation of the ulcer is a degree of inflammation in the part itself. This undue excitement results either from a continuance of the original inflammation, kept up by exercise of the diseased part, by too nourishing a diet or other causes, or from the imprudent and too early local application of stimulating dressings. In this form of the disease, the patient will derive benefit from repose, low diet, gentle aperients, anodyne fomentations, and the application of compresses soaked in an aqueous solution of opium. The opiate, or simple cerates, are the most appropriate dressings; and these may be assisted by gentle pressure, by means of compresses and a roller methodically applied.

Again, the surface of the open bubo is commonly covered with a thick slough; the ulcer itself is indolent, or disposed to spread, and its edges are red, angry, and elevated. This is an ordinary condition of the true virulent bubo; and all that has been said on the ulcerating stage of chancres is applicable here. It may become necessary, in these states, to destroy the diseased surface of the sore by means of caustics; and for this purpose the nitrate of silver, the mineral acids, the acid nitrate of mercury, or the other caustics already mentioned, may be employed. The dressings well suited to this form of bubo are weak solutions of the sulphate of copper or zinc, or of the chlorides of lime or soda. Creasote is also very useful as a local application, more or less diluted.

In chronic open indolent bubo, with a foul surface, where most remedies have failed in modifying the condition of the sore, a small quantity (from one to five grains) of the bichloride of mercury, previously finely powdered, has been dusted over the surface of the sore, and suffered to remain for some hours. The application of the remedy is followed by severe pain and inflammation, but generally succeeds in producing a healthy condition of the sore, speedily followed by complete cicatrisation.[1] The indications of all local applications are to be sought for in the condition of the sore; they require constantly to be changed; what is useful to-day may be injurious to-morrow.

A formidable obstacle to the cicatrisation of an open bubo is occasionally presented by the edges of the sore itself. The integuments covering the cavity have lost part of their vitality; they are more or less discoloured, indolent or indurated, and offer no disposition to adhere to the under surface of the sore, or to throw up granulations by which the ulcer might be filled. In this condition they offer a permanent obstacle to cicatrisation, and it becomes necessary to adopt means to bring about their union with the subjacent parts, or else to remove them altogether by the knife, scissors, or caustic. To accomplish the first intention, the under surface of the integuments may be rubbed with the sulphate of copper, the nitrate of silver, or some other caustic, the cavity of the ulcer filled with soft lint, covered with some dressing suited to the condition of the sore, and a bandage and compress applied.

When it becomes necessary to remove the floating portions of integument, caustics or the knife may be used; but this operation must not be performed on a truly venereal bubo in a state of ulceration, inflammation, or great irritability. These conditions must be subdued before such an operation is thought of. The late Dr Wallace thought that the removal of the diseased integuments covering an open bubo might in most instances be prevented "by the vesication of the diseased integuments, and also of the sound skin for a little way beyond them by means of the nitrate of silver." The application of the caustic is to be renewed every four or five days, or as often as the surface of the integuments to which it might have been applied becomes covered by a new cuticle. It will also be useful to apply it occasionally to the whole ulcerating surface, and to the orifices of any fistulous openings that may exist, not with a view of destroying exuberant granulations, but to excite the granulating surface to more healthy actions.[1]

---

[1] This practice originated with Dr Ordinaire. He first employed it in the treatment of cancerous or foul sores of the rectum, nose, and other parts. The results of the method were so favourable, that Cullerier tried it at the Hôpital des Vénériennes in the treatment of foul indolent bubo. It has in many cases exceeded his most sanguine expectations.

Dr Wallace states that he has known loose portions of integument of several inches in diameter, which were so diseased in their structure that they lay on the surface of the ulcer like a dead flap, saved by this process. "I have also," continues this author, "accomplished the cicatrisation of other ulcerations, which presented numerous fistulous openings or detached flaps, and in which all the ordinary means, such as injections, compresses, incisions, &c., had all been employed in vain. In short, I can most confidently recommend this treatment of indolent and atonic ulceration, &c., as well as that of abscesses of the same class, as a very great improvement in the general practice of surgery.

The internal surface of the open bubo is rarely smooth, uniform, or continuous; it is generally uneven and irregular, frequently divided into compartments, or presenting numerous orifices which are the openings to other glands, which have suppurated, and thus open by small orifices into the chief or general cavity, which is very commonly an abscess in the cellular tissue surrounding the gland or glands, which have been originally the seat of disease. It is this pathologic condition of open bubo which renders the treatment so difficult and tedious.

Injections may be employed in the treatment of these fistulous openings, with a view of modifying the condition of their surfaces, and disposing them to cicatrise. Solutions of the sulphate of copper, the nitrate of silver, the sulphate of zinc, or bichloride of mercury[2] may be thus employed.

---

[1] See Wallace, op. cit., p. 381.

[2] ℞ Cupri sulph., gr. vj;
Aquæ dest., ℥j. M.
℞ Argent. nit., gr. vj;
Aquæ, ℥j. M.
℞ Zinci sulph., gr. x;
Aquæ, ℥j. M.
℞ Hyd. bichlorid., gr. j;
Aquæ, ℥j. M.

If appropriate dressings and compression fail in the treatment of these fistulæ or sinuses, it may be necessary to lay them open with the knife. Sometimes the enlargement of the orifice is sufficient, or it may be necessary to divide them in their whole length; or if the situation of the sinus permit, a counter-opening will generally answer all the purposes of complete incision, a practice attended with much terror and pain to the patient. Counter-openings may be made with the caustic potash; the caustic as well as the opening may contribute to the cure in these cases. The fistulæ may likewise be cauterised internally by means of solid nitrate of silver, or a small portion of the powdered bichloride of mercury, introduced by means of a grooved director; this practice is painful, but generally successful in its results.

M. Ricord has laid down a positive law, "that a bubo which suppurates specifically—that is to say, which furnishes an inoculable pus—is never followed by secondary symptoms." (28th Letter, p. 287.) Inoculation is not practised to a sufficient extent in this country to enable me to indorse or refute this opinion. All I can say is, that buboes which suppurate freely, and to all appearance specifically, are followed in some cases by secondary symptoms. I mention one or two cases under my own care.

M. L., never before diseased, contracted a soft chancre, followed by a bubo in each groin, which suppurated. Before they were well, he had ulcers on the tonsils, and a scaly eruption.

M. A., never before diseased, large suppurating bubo in one groin, following a small soft chancre. Six weeks after, he had a copper-coloured mottling all over the body (roseola), ulcers on each tonsil, enlarged sub-occipital glands, and severe pains in the head.

On the other hand, I could detail numbers of cases where buboes which have suppurated specifically, and assumed a most formidable local condition, have not been succeeded by the least constitutional taint. The law appears to be, that the suppurating bubo is not followed by secondary symptoms; but to this law there are occasional exceptions.

The indolent bubo, symptomatic of indurated chancre, of which I have already spoken, and which consists in a chain of enlarged glands in one or both groins, requires little local treatment. These buboes have generally no tendency to suppurate; they are the first indications of a constitutional taint, and are to be dispersed by constitutional treatment only: the treatment I have mentioned as applicable to indurated chancre is to be adopted here. They generally subside with the induration of the chancre, but this is not always the case. After all taint on the system has apparently been eradicated, and all induration of the chancre has disappeared, one or more glands, although reduced in size, do not diminish to their pristine condition; they remain permanently enlarged, although they may have lost all their specific character. I have seen them remain for years, the patient otherwise in good health. In two or three instances where secondary symptoms have been very rebellious to treatment, I have known these buboes slowly suppurate; and I have also noticed, when this suppuration has taken place, that the constitutional taint, previously difficult to treat, has quickly and permanently disappeared.

PART II.

CONSTITUTIONAL OR SECONDARY SYPHILIS.

CHAPTER XIII.

OF CONSTITUTIONAL OR SECONDARY SYPHILIS.[1]

CONSTITUTIONAL or secondary syphilis consists of a class of morbid actions, which make their appearance sooner or later after a discharge from the urethra, or after the healing, or during the course of a primary venereal sore on the genitals or elsewhere; or, again, it is due to other causes hereafter to be mentioned. Constitutional syphilis is produced by the absorption of the syphilitic virus and its mixture with the blood; it is a blood disease, a dyscrasia or diathesis, of which the various effects about to be mentioned are the symptoms.

The phases of syphilis have been divided into the primary, the secondary, and the tertiary; or, as Hunter has already laid down, constitutional affections of the first and second order of parts. The primary symptom is due to the direct application of the venereal poison by means of sexual intercourse or inoculation. This is capable of propagation, from one individual to another, by intercourse or inoculation. The primary symptom may be followed by a series of symptoms which are successive or continuous, but not constitutional or secondary; these are new chancres, buboes, or abscesses, &c., of various kinds, these being purely local, and not dependent upon an affection of the constitution generally.

---

[1] "Syphilis constitutionnelle; accidents secondaires et tertiaires,"—Ricord. "Maladies véneriennes consécutives,"—Desruelles.

Secondary symptoms are those which make their appearance after the economy has become generally tainted by the venereal poison, during which process the matter has undergone modifications which, in some measure, change its character. Secondary syphilitic diseases appear on the skin or mucous membranes, in the eyes or the testicles, in the bones, and in the internal organs.[1] Constitutional syphilis rarely makes its appearance before the second week after primary infection, more commonly later, towards the fourth or fifth weeks, or at periods very much more remote.

When syphilis has continued in the economy for an indefinite period of time, the symptoms which are termed secondary disappear, or lose the properties which at first characterised them; whilst others of a different kind succeed, to which has been applied the term of "*tertiary*."[2] The tertiary symptoms appear at an indefinite, and generally very long period, after the primary diseases, and in the greater number of subjects, either after secondary symptoms have disappeared, or whilst these are still manifest in the constitution; thus it is exceedingly common to see scaly or pustular diseases of the skin coexisting with diseases of the bones or testes. The diseases which have been termed tertiary are deep-seated diseases of the skin, as tubercles, and affections of the glands and bones, as periostosis, exostosis, caries, necrosis. To these may be added various internal affections, as yet neither well known nor described. Many of the constitutional forms of disease are capable of propagation by contact or inoculation; and in persons cohabiting as man and wife, a secondary syphilitic symptom existing in one is very commonly produced in the other, in precisely the same form.

---

[1] See Yvaren, 'Metamorphoses de la Syphilis, &c.,' Paris, 1854; Virchow, 'Syphilis Constitutionnelle, par Picard,' Paris, 1860. In the latter work, syphilis of the spleen, the liver, the lungs, the brain, the heart, the kidneys, and other internal organs, is methodically described.

[2] It is the pathological character of the morbid change which marks the symptom as being a secondary or tertiary one. There are two changes which take place in organs as a consequence of constitutional syphilis: the first resemble inflammatory diseases, the second are due to specific changes; the first are secondary, the second are tertiary. The great variety of diseases of the skin which succeed to syphilis, as scaly, pustular, or papular affections, are inflammatory in their nature, or, as Virchow calls them, hyperplastic. These diseases differ in no way in their pathology from other affections of the skin not due to syphilis; they are inflammations, with effusions of serum, pus, or lymph. We recognise in such forms inflammation and its products only; but in the tertiary symptom there is an actual change of structure, a deposit of a specific kind; this is well observed in one form of syphilitic sarcocele. For a minute description of the changes produced in various organs by syphilis, to which changes the term tertiary has been applied, I must refer the professional reader to Virchow's work already quoted, especially the twelfth chapter.

It may be naturally inquired here, whether any treatment of the primary disease can certainly prevent the constitutional. The early and complete destruction of the primary disease, by an escharotic that will disorganise the tissues to the depth of the ulcer before absorption has taken place, is the only certain mode of preventing constitutional taint. I have before stated that the nitrate of silver is in most cases not sufficiently destructive for this purpose; and the caustics that will char the tissues to the depth of the ulcer are the potassa fusa, the potassa cum calce, the acid nitrate of mercury, the carbo-sulphuric, or the chloride of zinc pastes. This practice is useless in a chancre already specifically indurated, the induration itself being an indication that the constitution is already affected, and the local disease only to be cured by constitutional remedies.

Unhappily there are numerous reasons why the practice just recommended cannot always be adopted with a prospect of success. In many instances the surgeon is not consulted till many days after the establishment of the disease, when, in all probability, absorption has already taken place. In other instances, the situation and character of the ulcer are such that we are prevented from resorting to the method recommended; though in all instances it should be done, if at all practicable.

All persons are not equally susceptible of a constitutional infection from a primary sore; hence some writers have spoken of the syphilitic temperament, a vague expression, to which no definite meaning can be attached.[1] Those individuals are most likely to suffer from constitutional syphilis whose general health is bad when they contract a primary sore; hence, chronic affections of the skin, stomach or digestive organs, scrofula, general cachexy, or other diseases, general or particular, under which the patient may labour at the time of infection, are to be considered as predisposing causes. Attention to the general health is of the first importance, and the constitution of our patient must most materially modify our treatment.

---

[1] It is quite certain that many patients throw off a constitutional taint with comparative facility; but in others it remains for years, or for life, in spite of the most judicious and persevering treatment.

Secondary syphilis, like primary, becomes formidable by neglect and ill-treatment; it is a principle we should never lose sight of, to commence seriously the treatment of constitutional syphilis the moment it becomes manifest in the economy. There is no contra-indication to the immediate commencement of this treatment; should the constitution be bad, or the patient diseased, it must be modified to suit these circumstances: even the period of gestation is no bar to the anti-syphilitic treatment. M. Ricord states that he has seen more females miscarry when their disease has been suffered to go on unchecked, than when they have been subjected to an anti-syphilitic treatment, framed with judgment to suit the circumstances of the case. The same remarks apply to the period of suckling.

When constitutional syphilis is complicated, these complications should never be neglected; if they coexist with acute or subacute affections of internal organs, the latter ought first to be attended to; these should be subdued before we commence the anti-syphilitic treatment. When scrofula, affections of the skin, or chronic diseases of internal organs, complicate constitutional syphilis, the anti-syphilitic treatment may be at once commenced; but it must be framed and conducted with much care, that the accompanying affection, of whatever character it may be, may not be aggravated by it. An exclusive, or empirical treatment, cannot be too strongly condemned. It is in these cases that the compounds of iodine and mercury, iodine and iron, and iodine and potass, are commonly so useful, but, above all, the mercury vapour bath.[1]

---

[1] See the whole of the excellent remarks of M. Ricord, on Complicated Constitutional Syphilis, op. cit., pp. 615-18.

"En un mot, l'accident le plus saillant, l'épiphénomène, quel qu'il soit, est celui qu'il faut d'abord combattre, sans négliger aucun des élémens qui peuvent fournir aux indications thérapeutiques."

Whenever any of the forms of constitutional syphilis are accompanied by fever, or much inflammation, an antiphlogistic treatment and regimen are in the first instance necessary. Without a rigorous observance of this rule we can have no rational hope of success. Whatever be the character of the constitutional symptoms, if they are accompanied by local inflammation or general excitement, an antiphlogistic regimen and treatment ought to be followed till such symptoms are subdued. An antiphlogistic treatment is not to be adopted where these phenomena are absent, and of course its employment as a general measure is to be severely condemned; for in many cachectic or scrofulous patients, or those whose constitutions are already undermined by chronic disease, an opposite plan of treatment becomes necessary. In the latter instances, a full, nutritious diet is essential to success. Long experience has taught me that debilitated and scrofulous patients, who have been badly fed, quickly recover their general health, and are cured of syphilis under a full diet; whilst those whose circumstances have enabled them to live well, frequently become cachectic under a low diet; their syphilitic affections remain stationary, and they only recover their health, and lose their disease, in returning to the habits of living to which they have been accustomed.

That the internal treatment adopted against any particular form of constitutional syphilis may have every chance of success, it is also necessary that the stomach and bowels be kept entirely free from all irritation or disease.

CHAPTER XIV.

OF THE CAUSES OF SECONDARY, OR CONSTITUTIONAL SYPHILIS.

The chief causes of a constitutional venereal taint, are: 1. The absorption into the system of the virus from a primary venereal disease, whether this be a sore, a discharge, or a bubo. 2. Inoculation or contagion, *i. e.*, the direct communication of a secondary or constitutional affection, from a diseased to a healthy person, without the intervention of any primary disease. 3. Hereditary transmission. 4. The treatment of the primary disease, whether due to the use or to the neglect of mercury. 5. A peculiarity of constitution.

I.—PRIMARY ULCERS AND DISCHARGES CAUSES OF SECONDARY SYPHILIS.

It is universally admitted that the most frequent cause of a secondary venereal disease is a primary venereal ulcer; and it is also as generally admitted that the ulcer which is most commonly followed by such a condition is one which presents a well-marked induration during its course, or is so where the cicatrix or site of the ulcer becomes indurated when the ulcer has closed. Other ulcers, however, which do not present this appearance of induration, are occasionally though not so frequently followed by secondary symptoms. Again, many forms of primary discharges from the urethra are followed by secondary diseases; it is well known that M. Ricord considers such discharges as symptomatic of primary venereal ulcers in the urethra. Certain it is, however, that discharges from the urethra, in which no ulcer can be discovered, and where no circumscribed induration can be felt along the track of the urethra, and where, again, the matter discharged has not yielded any characteristic pustule by inoculation, when tested, are occasionally, though not commonly, followed by constitutional diseases.

CASE XVII.

Primary disease, discharge from the urethra; never, at any period, any other form of primary venereal disease; secondary disease six months after, in the testis and in the bones; cure by calomel and opium, and the iodide of potassium.

M. B.——, æt. 30, came under my care as an out-patient of the Queen's Hospital, in July, 1849, suffering from enlargement of the right testis, pains in the arms, bones of the head, and other parts, with nodes on the head and clavicle, and general enlargement of the right knee-joint. One year and a half before his admission, he contracted a discharge from the urethra, for which he had never been treated, and for which he had never taken medicine; this after a long period disappeared of itself, and left no induration in the urethra discoverable by examination, nor any impediment to the passage of an instrument, or to the stream of urine behind it. Six months after, his right testicle enlarged without pain; to this succeeded general pains in the limbs and head, which incapacitated him from work; and large nodes formed, two on the head, one of which contained matter, and one on the clavicle, with general bony enlargement of the knee.

He was put on the use of calomel and opium at night, with the iodide of potassium and colchicum in the day; and under this treatment all the symptoms disappeared. No change was made in the remedies employed.

The cases recorded by M. Cazenave are well-marked examples of constitutional diseases which had never been preceded by any primary disease, except a discharge from the urethra.[1] Mr Erasmus Wilson,[2] Dr Egan,[3] and others, support this doctrine.[4] I have seen in private practice now so many cases where the starting-point of constitutional syphilis was a discharge from the urethra, and where the patients have had no other form of primary disease, that this symptom must be admitted as the occasional cause of constitutional disease. My experience must be corroborated by all other surgeons. One case especially forces itself upon my mind of a poor gentleman who had never had any primary disease but a discharge from the urethra. This was followed by a most formidable outbreak of pustular syphilis, which harassed him for ten years. M. Lagneau fils, in the 'Archives Générales' for March 1846, details six cases which occurred in his own practice, and that of his father, of well-marked constitutional syphilis succeeding simple purulent urethral discharges without evident ulceration. What the nature of these primary urethral discharges may be, is another question. If they result from an ulcer in the urethra, the existence of the latter must be a matter of conjecture, since we are unable to demonstrate its existence. I have already expressed my belief that secondary syphilitic discharges from the uterus of the female may occasion urethritis in the male, and it is not improbable that such discharges may be the origin of constitutional syphilis under the circumstances I am now considering. (See the chapter on Syphilis of the Uterus.)

---

[1] Cazenave, 'Traité des Syphilides.'

[2] Syphilis, 'Constitutional and Hereditary,' pp. 20, 21, 22.

[3] Egan, op. cit., p. 18, &c.

[4] 'British and Foreign Med.-Chir. Review,' No. xv., p. 88.

CASE XVIII.

Discharge from the urethra as a primary symptom: scaly blotches on the skin, and a node on the forehead, as constitutional symptoms; cure by the mercurial vapour bath.

A gentleman consulted me respecting a lump on his forehead, which was red, tender, and painful; he had upon different parts of his body, and on the head more particularly, some dry, scaly blotches; his hair also came off rapidly. He had never suffered from any primary venereal disease, except a discharge from the urethra. When I saw him this no longer existed; the urethra presented no induration in any part, a bougie passed easily, and he made water in a good free stream.

I recommended the use of the mercurial vapour bath, which was administered every other day. I prescribed no medicine internally. In a month the cure was complete.

I could multiply such cases, which leave no doubt as to the fact that discharges from the urethra, apparently in no way different from ordinary gonorrhœa, and which are not accompanied or followed by any perceptible organic change in the urethra, are the primary causes to which secondary syphilis is occasionally due.

II.—CONTAGION A CAUSE OF SECONDARY SYPHILIS.

Constitutional syphilis may be communicated from a diseased to a healthy person, without the intervention of primary disease. I do not mean to assert that constitutional syphilis is commonly capable of propagation by inoculation on the same person with a lancet puncture, and I have never succeeded in producing any effect of this kind by inoculations practised on an individual, already diseased, by his own secretions; and I have never attempted, and never shall, to propagate secondary syphilis from the diseased to the healthy.[1] Waller,[2] Wallace, and Vidal de Cassis[3] have, however, succeeded in this. The case of M. Boudeville (*interne en pharmacie*), who voluntarily submitted to inoculation with the matter of the secondary syphilitic pustule, and in whom a regular secondary pustular disease was produced, is conclusive on this point. (Vidal de Cassis, p. 357. See the report of the Imperial Academy of Medicine on this point, page 34.) Although I have never seen secondary syphilis propagated by inoculation from the diseased to the healthy, I have seen it communicated, by contagion, in this way in a great number of instances; two I have already recorded. The circumstances under which this takes place are generally from the husband to the wife, where the primary disease, having been cured for an indefinite period of time, a secondary attack takes place after marriage, and by constant contact is thus communicated to the wife. Dr Copland says, "I have had sufficient reason to conclude that whenever a secondary venereal ulceration seated on the integuments, or on the mouth or throat, produces a secretion or discharge which comes in contact with a mucous surface, or with an abrasion of the cutaneous surface, or is even allowed to remain in contact with an unabraded surface (see Ceeley's Experiments on Vaccine Lymph), infection may take place (*i.e.*, if the party exposed be free from syphilis), and that this liability exists both in children and in adults. The communicability of secondary syphilis, especially when the sores have proceeded to secrete or produce a fluid exudation, was a fact well recognised in former times, and has been witnessed by myself in the course of my experience in several instances." ('Dictionary of Medicine,' article Venereal Disease.) These are precisely the conditions I have already laid down as likely to communicate secondary syphilis from the diseased to the healthy. A secreting surface on the one hand, and an abraded surface on the other, with prolonged or repeated contact; they are just the circumstances under which the disease was communicated from the diseased to the healthy by Wallace in six instances. I have seen this mode of communication of constitutional disease in about eight cases. M. Rodet of Lyons supports this view. See his paper in the 'Archives Générales, Février, 1859.' I record a recent case, which I carefully watched and noted.

---

[1] Dr Guényot and M. Gailleton were prosecuted at Lyons for inoculating a child not affected with syphilis, with secondary syphilitic pus; the inoculation was successful, secondary syphilitic symptoms appeared within two months; but they were fined for the experiment, one in a sum of 100 francs, the other in a sum of 50 francs.—'Gazette des Hôpitaux,' Dec. 1859; Edin. Journal,' March, 1860.

[2] 'Du Caractère Contagieux de la Syphilis Secondaire, par le Docteur Waller,' in the 'Annales des Maladies de la Peau, et de la Syphilis,' tom. iii., p. 174.

[3] 'Traité des Maladies Vénériennes,' pp. 240, 261, 355.

CASE XIX.

B. M. had suffered from constitutional syphilis for two or three years; in this state she twice became pregnant, and was delivered of two dead children. After the last labour, pustules broke out on legs and arms to the number of twelve or fourteen. These were soon covered with dark, thick crusts, which being detached, were found to cover deep, foul-looking ulcerations. She had profuse vaginal discharge, but no sores. (See the chapter on Secondary Syphilis of the Uterus.) In this state she made the acquaintance of a very healthy person, who repeatedly slept with her: in a few weeks he had a crop of pustules precisely like his mistress; they became covered with the same kind of crust, and which concealed similar sores. I treated both, and repeatedly examined and compared the diseases; they were exactly alike; neither of them had any sore on the organs of generation. The man had never been diseased before.

In a number of instances, secondary venereal diseases, when propagated by contagion, produce their like. Thus skin diseases are communicated under the same specific form, so are secondary condylomata. Some modern authors (Waller, Erasmus Wilson, Porter, the late Mr. Colles, myself, and others) maintain the occasional propagation of constitutional syphilis by means of the secretions alone. The ovum is constantly diseased by the secretions of the father; hence there is every reason to suppose that such an origin of constitutional taint is exceedingly probable, especially when we consider the condition of the blood (whence all the secretions are derived) in secondary syphilis.

Mr. Porter has recorded several cases of the communication of constitutional syphilis by means of the semen ('Dublin Journal of Medical Science,' May, 1857). He says, "The semen of a diseased man deposited in the vagina of a healthy woman will, by being absorbed, and without the intervention of pregnancy, contaminate that woman with the secondary form of disease, and that without the presence of a chancre or any open sore either on the man or woman"—P. 264. It is well known that this was the opinion of the late Professor Colles. I have seen four cases of this nature in the course of my practice, in which there could be no doubt that this was the mode in which disease had been communicated.

CASE XX.

B. D. had suffered from various forms of constitutional syphilis for four years. He remained perfectly well for twelve months, and then married. Soon after his marriage, he had an eruption of copper-coloured spots on the skin, and a sore throat. He lost his hair and eyebrows. His wife, an exceedingly healthy young lady, had an eruption similar to her husband; she lost her hair and eyebrows; she had also ulcers in the throat. The genitals were entirely free from complaint; the lady had never suffered from excoriation, ulcer, or discharge. This lady subsequently became pregnant, and was prematurely delivered of a dead child.

CASE XXI.

R. T. consulted me in June, 1858, respecting some secondary syphilitic symptoms. I saw him twice. The symptoms disappeared under treatment. About eighteen months afterwards he married, having no symptoms of syphilis whatever at the time, nor for many months previously. Shortly after his marriage, his wife was affected with superficial sores in the vagina, a purulent discharge, and swelling of the tibia. She had afterwards a well-marked leprous eruption, and for this eruption she was placed under my care. Some months after the first symptoms had appeared, she became pregnant; she went her full time, but had a diseased child.

In both these cases the patients became pregnant after the first symptoms of syphilis had appeared.

CASE XXII.

I was called in consultation to see a gentleman, about 24 years of age, with secondary phagedena of the fauces. He had been married some months. For more than a year previous to his marriage, he had been apparently quite free from syphilis; but before this he had had chancres, with indolent bubo, which did not suppurate. A month after his marriage, his wife, previously a healthy-looking young lady, began to complain of irritation of the vagina, with discharge. She was examined: she had superficial ulceration of the os uteri, discharge from the orifice, and an aphthous condition of the whole vagina. She had also a sore throat, and some pustules on the skin. Her husband had also a pustular eruption. The spots on each resembled each other very closely. She had never been pregnant.

It has been supposed that when the female is diseased by the semen, it is only in the case of pregnancy that she becomes so, and that it is through the medium of the fœtus, and not directly, that contagion takes place. (See Mr. Jonathan Hutchinson's paper, and the discussion on it at the Hunterian Society, Oct. 8, 1856.) I am now, however, quite positive that although this may be the more frequent mode of contagion, the female may be and frequently is diseased directly by the semen, the male not having at the time any evidence of syphilis, but having previously suffered from constitutional syphilis.

III.

Hereditary transmission as a cause or origin of constitutional syphilis is too well known, and too universally admitted, to require me to dwell on it here. Its physiological nature is clearly a mode of contagion through the medium of the secretions, and, in most instances, the transmission takes place from the father to the ovum, the mother never having been diseased, and never having exhibited any symptoms of disease.[1] If the mother be suffering from secondary syphilis, and give birth to a diseased child, the contagion takes place through the medium of the blood itself.

IV.

The general and medical management of the primary disease has, no doubt, a most material influence over the prevention or development of a constitutional taint. There is no reason why a grain of mercury should be exhibited for the cure of a primary venereal affection which has, on the very first discovery of the disease, been destroyed by a caustic sufficiently powerful. Many constitutions are inimical to mercury, and its exhibition so far disturbs the system that it cannot be borne, and its use must consequently be given up. There are other peculiarities of constitution, or conditions of constitution, in which, although mercury is borne, it appears to predispose to the occurrence of certain diseases, which are not known except the patient has had syphilis, and taken mercury for its cure.

Mercury is certainly not the general or common cause of secondary or constitutional syphilis, although its injudicious exhibition frequently produces very formidable constitutional mischief. Secondary syphilis occurs where mercury has never been used, and when administered for other diseases, even when pushed to salivation, never gives rise to diseases resembling secondary syphilis.

---

[1] I have recorded in another part of this work several cases illustrating this point. See the chapter on Infantile Syphilis.

In 143 cases of secondary syphilis detailed by M. Cazenave, 46 had taken mercury for the primary disease, and 97 had taken none at all. These facts settle two points: 1st, that mercury does not certainly prevent secondary syphilis; and 2nd, that it does not cause it. Mercury, however, must be considered as a most powerful therapeutic agent in the treatment of secondary syphilis, and it is in this class of syphilitic cases especially that its judicious exhibition produces the best effects, when combined with other treatment, which I shall presently detail.

There is a great deal in the management of the patient generally during the time a primary sore is under treatment, and as much depends upon the patient as upon the surgeon. I believe the ordinary methods adopted under these circumstances are not sufficient, and that the general habits and diet of the patient are not sufficiently attended to; for a constitutional disease is frequently developed under the combined influence of an over-stimulating diet and irregular habits, which, under different circumstances, would never have appeared at all. There is no question but that the local treatment of, and the constitutional treatment during the presence of a primary syphilitic sore, has an immense influence over the production of secondary or constitutional disease. An over-stimulating local treatment unquestionably disposes to the occurrence of bubo, in the same manner that the glands inflame, enlarge, and suppurate, in the vicinity of irritations in other parts of the body.

Many of the primary forms of syphilis are accompanied by a series of symptoms, which have been termed consecutive, and which are ordinary pathological phenomena, dependent upon irritation or inflammation, not of a specific character, but more likely to take place in some constitutions than others. If these are mistaken by the unlearned for specific diseases, and treated specifically by mercury, great bodily mischief may be produced, when the simplest medication with unirritating local treatment and a regulated diet would in all probability have brought the primary disease to a safe and speedy issue, whilst the constitutional symptoms would never have appeared at all.

Another frequent cause of the occurrence of constitutional mischief is, no doubt, the administration of mercury for the cure of primary syphilis at improper periods, whilst the economy is not prepared to receive it. A certain degree of constitutional disturbance, irritability, or fever, almost invariably accompanies the first days of a primary venereal sore, and during this period mercury should never be given, nor till the patient is prepared for it, by low diet, aperients, and the warm or vapour bath. If mercury be administered during a condition of local or general irritability, constitutional symptoms are very likely to be developed. It is from this cause that we frequently see constitutional symptoms arising during the second or third week of a primary sore, where the patient has been suffered to follow his ordinary diet and habits. There are also certain conditions or forms of the primary sore, and different varieties of phagedena, during which, if mercury be exhibited, secondary symptoms are very likely to follow.

Again, there are other forms of constitutional disease, which must be considered as wholly independent of the treatment of the primary one, and which are the result of absorption of the poison of syphilis, and its mixture with the blood. The earlier symptoms of constitutional syphilis in good constitutions appear most commonly under the form of diseases of the skin in the exanthematic, scaly, papular, or pustular forms. The mucous membranes are the next parts affected, particularly of the fauces and throat; deep redness, with superficial or deep ulceration, accompanying most commonly the earlier symptoms of skin disease. It is not often, if the primary sore have not been improperly treated, and mercury not hastily or injudiciously given, that the more formidable symptoms of constitutional disease make their appearance, before the healing of a primary sore. They appear soon after it has closed, or whilst the cicatrix is yet hard. Neither do the more formidable symptoms appear in ordinary cases, unless they have been preceded by some affection of the skin or mucous membranes. There are, however, instances, and I have witnessed several, where diseases of the bones and periosteum (which are generally amongst the latest constitutional symptoms to appear) have been ushered in almost before the primary sore has been healed.

Perhaps one of the most frequent causes of the continuance or non-eradication of constitutional syphilis, is the recommendation by the surgeon, and the adoption by the patient, of an incomplete treatment. Thus all treatment is very commonly given up by the patient as soon as a primary sore has healed, or an eruption disappeared; and the customary habits of life are at once resumed, diet neglected, and medicine thrown aside. In such instances we have only succeeded in getting rid of a symptom, not of eradicating a disease; and sooner or later other symptoms are made manifest, and they are generally of a more formidable character than those to which they gave place. Endless examples might be given, corroborating this statement; a patient has a better chance in following no treatment at all than following an incomplete one.

Treatments are rendered incomplete from two causes: first, from the adoption of inefficient remedial agents; and, secondly, from discontinuing the remedies too soon. If a primary sore be treated, the remedies should be continued for fourteen days at least after it has healed, and hardness of the cicatrix disappeared; in the secondary forms of disease in the skin and mucous membranes, the patient should follow treatment for a month after the subsidence of symptoms. In the tertiary forms of tubercles, diseases of the periosteum and bones, the remedies should be continued for two or three months after the disappearance of the symptoms. The next common cause is, the inefficient or improper nature of the remedies used, or the irregularities of the patient during the time he is using remedies. If mercury be used, the proportions and that form of administration should be chosen which suit the patient; again, these preparations must be used at the times and under the circumstances already laid down. With some patients all preparations of mercury taken internally disagree; they pass off by the bowels, or produce so much irritation that their use must be given up. In these instances, frictions or fumigations may be substituted for internal remedies; and these can very commonly be borne, and are useful when internal remedies are injurious. Under this head may be mentioned also the use of mercury for syphilitic symptoms, which do not require mercury for their cure.

The neglect of warm, or simple, or medicated vapour-baths, during treatment, more particularly of the constitutional forms of disease, is, again, one of the most frequent causes why syphilis becomes protracted, and why it so frequently returns when it has been supposed to be cured. I have for the last twenty-five years paid particular attention to this subject, and made numerous experiments in reference to it. I have treated many thousand cases, both in hospital and private practice, with and without the mercurial vapour bath; and, as a general statement, in almost every form of constitutional disease, I believe I can truly say that the treatment is diminished from one-half to one-third of the time by its use; the cures are vastly more certain, and there is no risk to the constitution of the patient, his health generally being improved by the treatment.

Vapour-bathing and mercurial fumigations have for a long period been employed in the treatment of syphilitic diseases, more particularly of the constitutional forms, and with the best success. I have adopted, however, a method somewhat different to any I have hitherto seen used: it consists in the application of mercurial vapour in a moist state to the surface of the skin, combining, in fact, the mercurial fume with the ordinary vapour-bath. I have made a number of experiments on this combination, and found it succeed in a variety of cases, where ordinary mercurial fumigation or the vapour-bath, employed separately, had failed.[1]

These baths should be associated with an appropriate internal treatment. I have frequently seen them succeed where internal treatment had failed, but in most instances they should be associated with it. Such, however, is their efficacy as an auxiliary measure, that in all instances the internal treatment may be of the mildest kind. When mercury is indicated, the assistance afforded cannot be too highly appreciated, since half the quantity of the remedy will suffice for the completion of the cure, which is accomplished without risk to the constitution of the patient; a circumstance so much to be feared under the old plans of mercurial treatment.

---

[1] Of all the auxiliary remedies employed in the treatment of venereal diseases of the skin, the most valuable are, without exception, *Baths*; and at the head of these must be placed the various forms of vapour-baths. (Cazenave, on the 'Syphilida,' p. 214.)

V.—PECULIARITY OF CONSTITUTION, OR HABIT OF BODY, A CAUSE OF SECONDARY SYPHILIS.

A peculiarity of constitution, or habit of body, is again to be looked upon as amongst the causes of secondary syphilis. Authors have imagined, what they have termed a syphilitic temperament, but have failed to point out in what this peculiar temperament consists. A strumous habit has been considered as predisposing to the ravages of secondary syphilis. However this may be, it will be found that constitutional syphilis is often met with of the most obstinate kind in persons who, otherwise, appear in the best health, and in whom there is no evidence of struma. If the health be bad when a primary sore is contracted, there is greater reason to fear secondary disease than though the patient had been in good health at such time. " It is not sufficient," says M. Cazenave, " for the development of secondary syphilis, that the poison should exist in the blood; it requires, occasionally, other causes of a non-specific or ordinary character to develop it. These causes are infinitely variable: a strong moral emotion, a blow, a fall, a vapour-bath, excessive fatigue, a debauch, &c., are amongst the occasional causes which give rise to an outbreak of secondary syphilis."[1] I have traced attacks of constitutional syphilis very frequently to circumstances of this kind; atmospheric changes, and diet, are no doubt important agents in the development of secondary disease. I have seen one case where a well-marked venereal eruption occurred in spring and autumn for nine years; a second where an eruption appeared every spring for three; and a third, where the best health had been enjoyed for twenty years, where violent exercise, followed by some fever, developed a most formidable attack of pustular syphilis, with sore throat and iritis. I have often seen the symptoms of secondary syphilis reappear after indulgence in wine ; and it very frequently happens that patients who have once suffered cannot indulge in the stimuli which, before disease, they used with impunity, without syphilitic symptoms showing themselves. An extreme cold sometimes retards the development of constitutional syphilis. I was consulted by an officer, in one of the Arctic expeditions, who had symptoms of secondary syphilis before leaving England, which entirely disappeared under the cold of the Arctic regions, but which reappeared when he returned home. These facts show that, independent of the specific condition of the blood, occasional causes have a great influence both on the development and course of constitutional syphilis.

---

[1] Cazenave, op. cit., p. 528. See also Vidal de Cassis, op. cit.; 'Causes Déterminantes,' p. 264.

CHAPTER XV.

DIAGNOSIS OF SECONDARY SYPHILIS.

THE diagnosis of secondary syphilis is not always certain either in its acute or chronic form. When eruptions on the skin, or diseases of the throat, make their appearance within a few months after the existence of primary syphilitic diseases, and these symptoms have the well-known peculiar appearances of secondary syphilitic diseases, little doubt can be generally entertained of their nature; but in many instances, diseases which resemble syphilis are not syphilitic, and symptoms are really due to syphilis, which sometimes have not the characteristic aspect of this disease. Even M. Cazenave, with the experience of St Louis to aid him, sees great reason for doubt on this point. "I repeat," says this author, "that it is of the first importance to distinguish a syphilitic eruption from one which is not syphilitic; but how are we to arrive at such a result?" (Op. cit., p. 549.) It is difficult, in some cases, doubtless. I have already said that diseases of the throat and skin of peculiar aspect, occurring shortly after a primary disease, are generally syphilitic, especially if the patient have never before been subject to diseases of a like character. Sometimes our difficulties are increased by the patient stoutly denying the existence of any primary disease.

The symptoms of secondary syphilis, in its more acute forms, are seldom met with alone: secondary syphilitic diseases of the skin, whether scaly, papular, pustular, or tubercular, rarely occur without other symptoms of syphilis being present at the same time; and these concomitant symptoms are most commonly found in the throat in various forms of ulceration, of the soft palate, the tonsils, or the fauces. The sub-occipital lymphatic glands are also commonly enlarged in such cases, but they are also very frequently not affected.

Secondary and vesicular affections of the skin, rare forms of disease, but of which I shall record a few examples, may be confounded with various forms of herpes, particularly herpes zoster.

Scaly diseases may be mistaken for the ordinary forms of lepra or psoriasis, or the reverse, and I believe this is a very common error; I have seen numerous examples of it. I have recently witnessed a very formidable case of secondary pustular syphilis, which, in the onset, had been mistaken for smallpox. The syphilitic pustule on the face may also be confounded with acne.

Whatever difficulties may surround the diagnosis of the more acute or earlier forms of secondary syphilis, these difficulties are vastly increased where syphilitic symptoms occur in an isolated form, after many years of apparently good health, and occasionally when the patient denies ever having had a venereal symptom at all.

CASE XXIII.

Chronic disease in both testes, occurring as an isolated symptom of secondary syphilis; the diagnosis of the disease made out from the history of the patient's children; the patient denying the pre-existence at any time of any form of syphilitic taint.

A. L—, æt. 46, was admitted into the Queen's Hospital, for an ulcer on the scrotum, and enlargement of both testes, in November, 1850. Both testes were large, heavy, hard, and lobulated; and on the scrotum was a foul, dirty, deep ulcer, with thickened edges, which had first commenced as a pustule some weeks previously. This man had been married many years, and was the father of several children. He denied firmly that he had ever had gonorrhœa or syphilis at any period of his life. On stripping him, however, there were, on various parts of the body, cicatrices, which appeared to me similar to those which are left by the healing of sores consequent on the venereal pustule; but, having had smallpox, it was not easy to say to what they were due. On questioning him as to the health of his children and wife, it appeared that the first three children were alive and healthy; the fourth died at nine months old, and had sores on the genitals and on the nates; the fifth died at three months old, with similar sores; the sixth was born dead, and had blotches on the body; the seventh died of small-pox at fifteen months old, but previous to this had sores similar to the other children; the eighth child is now alive, but has had the same sores, and is reported to be sickly and wasting. The wife is reported to be healthy, but some months ago had an eruption of blotches as large as half-crowns. The patient was placed upon an appropriate anti-syphilitic treatment, and left the hospital with the ulcer healed and the testes much reduced in size. He took ten grains of the pil. hyd. chlorid. co. every night; the iodide of potassium, in five-grain doses, twice in a day; and after the healing of the ulcer on the scrotum, was directed to use friction on the testes with the unguent. plumbi iodidi.

It will be noticed that in this case, the disease in the testes occurred as an isolated symptom; there was no other concomitant to assist the diagnosis; but the condition of his children at once removed any doubt as to the nature of the disease in the testes. Syphilitic sarcocele very commonly occurs as an isolated symptom of constitutional syphilis, when no symptoms of the existence of this malady have been present in the system for years.

The ulcerated syphilitic tubercle on the face is very likely to be confounded with lupus. Cazenave considers the diagnosis, under many circumstances, as exceedingly difficult, but gives some rules which may guide us, which are not certain. The syphilitic tubercle is larger and rounder, of a dusky copper colour, and much less prone to ulcerate than that of lupus. In the ulcerated condition, the two forms of ulceration differ in some respects: the "syphilitic ulcer is deep, its edges swollen, of a dusky copper colour, and sharply cut; the ulcer produced by lupus is if a dull red colour, and looks as if confined to the surface of the skin."[1]

---

[1] 'Manual of Diseases of the Skin, by Cazenave and Schedel, translated by Dr Burgess,' p. 257.

CASE XXIV.

Ulcerating syphilitic tubercle of the lip and nose; close resemblance to lupus; no other concomitant or anterior symptom of secondary syphilis; cure by the mercurial fume, &c.

J. L——, æt. 36, was admitted into the Queen's Hospital in March, 1851, with a foul ulceration affecting the upper lip and alæ of the nose. The ulceration was not deep, nor were the edges thickened or sharp, but it was surrounded by a deep red areola; it had destroyed the central and a portion of each lateral cartilage, and had burrowed deeply into the integument of the upper lip. The disease had commenced in the upper lip, in the form of a red, hard spot or pustule, which then broke and spread by ulceration; the ulcers had destroyed the alæ and central parts of the nose, and were covered with thick black crusts. This patient had suffered from several attacks of primary syphilis, but had never had any symptom of secondary syphilis, except the one now present.

Many who saw this case considered it as lupus; it was admitted by the house-surgeon as a case of lupus. Without having any positive data to guide me, I believed it syphilitic, and consequently placed the patient on an anti-syphilitic treatment. The ulcer was poulticed to remove the crusts, and the ulcers were then dressed with a weak black wash, and the fume of the iodide of mercury was used every morning. A change in the aspect of the sore was soon visible; and the patient was discharged under the month, with the ulcer quite healed by a good, firm, but red cicatrix.

The symptoms of secondary syphilis assume many varied forms, and sometimes affect internal organs, producing symptoms which closely similate those which are reputed to belong to other diseases.[1] I bring forward a few cases which forcibly illustrate this proposition.

---

[1] I refer the reader for many valuable facts to the remarkable work of M. Prosper Yvaren, 'On the Diagnosis of Syphilis, On the Diseases which Syphilis may simulate, and On Syphilis in its latent state;' this contains numerous examples of the varied and unexpected forms under which syphilis may appear: also to the recent publication of Virchow 'On Constitutional

CASE XXV.

Localised constitutional syphilis—simulating schirrous mamma.

M. J——, a married lady, mother of two healthy children, in the fifth month of her pregnancy of her third child, was sent to me for my opinion respecting the nature of a tumour near the nipple of the left breast, which had been seen by many surgeons, who had considered it cancerous, and recommended its removal. It was a hard, solid lump, covered with a livid blush, and evidently on the point of ulceration. The position and character of the patient put the idea of syphilis quite in the background. On my third visit, my patient said, "Will you look at a lump on my forehead, which at times gives me great pain, especially at night?" I examined the lump, which was a circumscribed periostitis of the frontal bone. It struck me immediately that the disease was venereal, the lump on the forehead a node, and the lump on the breast a syphilitic tubercle, or a gummy tumour. I made my suspicions known to the husband, who admitted that he had gone astray, but was assured that he was not diseased, but had only a chafing. On examination, I found a discharge from the base of the glans penis, the site of which was thickened and hard. There was now no doubt, as intercourse had continued under these circumstances; yet on the part of the lady there was no sexual irritation, no ulceration or discharge. The lady was put on a course of mercurial vapour, with sarsaparilla, &c. The symptoms of syphilis disappeared under the treatment, but she was prematurely delivered of a dead child. She has since, however, enjoyed good health, and has had a healthy living infant.

CASE XXVI.

Localised secondary syphilis—simulating fissure, or ulcer of the rectum.

A. W—— had suffered under constitutional symptoms of syphilis for some time, which had all disappeared under treatment: they had consisted of condylomata around the anus, and

Syphilis, chiefly as it affects Internal Organs,' which is also very important, showing that many internal diseases, hitherto not suspected of being syphilitic, are so, and the pathological changes produced are those due to the tertiary stages of syphilis.

a sore throat. He consulted me for intense pain during defecation, so great as to produce faintness, and lead him to avoid evacuating the bowels, except when actually necessary. After some difficulty, I succeeded in passing my finger within the sphincter: I found an ulcer, from which all the pain doubtless proceeded. On pressing it, a similar agonising pain was experienced to that which he felt when the bowels were moved. I suspected from the history that this disease was syphilitic. I recommended the daily use of the confection of senna to keep the stools thin, and placed the patient on a course of mercurial frictions. The disease was rapidly and soundly cured.

CASE XXVII.

Hoarseness, with relaxed throat, and loss of voice for three years; no benefit from ordinary treatment; subsequently an attack of tubercular syphilis; cure of the former symptoms by the treatment of the latter.

A. B—— placed himself under my care to be treated for secondary syphilis. The symptoms consisted in the presence of a large round tubercle, covered by a patch of inflammation, in the substance of the left cheek. On the nates, and on the upper and back parts of the thigh, there had been also several of these tubercles, which had ulcerated, and become deep, irregular, foul, discharging ulcers, seated on an indurated base. He had suffered from primary sores seven years previously; and, three years ago, the throat had become painful on swallowing, was relaxed but never ulcerated, and the voice hoarse and feeble. For these symptoms he had consulted several physicians in London, and had used counter-irritation, local applications, and had been submitted to internal treatment of various kinds, with little or no benefit; as he got thin and weak, he began to fear threatenings of laryngeal phthisis. Seven weeks previous to my seeing the patient, tubercles on the back and thigh appeared, which slowly increased, ulcerated, and ran into foul sores; the tubercle on the face had also recently made its appearance. For these symptoms, doubtless syphilitic, the patient placed himself under my care.

He was placed on the use of the mercurial vapour bath, a milk diet, and the biniodide of mercury with the iodide of potassium. The tubercle on the face had disappeared after the sixth bath, and the ulcers, which were dressed with the ung. hyd. nit. oxyd., and unguent. elemi, looked healthy, and were healing rapidly. In six weeks all the symptoms had disappeared; but what is remarkable, the hoarseness, and uneasy feelings in the throat, were gone, and they have never returned.

The symptoms in the throat and windpipe in the preceding case were doubtless syphilitic, which is evident from their disappearing under the treatment which was directed against the syphilitic tubercles; but from their occurring as isolated symptoms of secondary syphilis, in a form not common, their nature and origin were overlooked.

Whilst, on the one hand, symptoms due to secondary syphilis are constantly unsuspected as to their nature and origin; so, on the other, are diseases reputed syphilitic, which certainly have no dependence upon the latter disease. This proposition is of immense importance in its practical application: patients who have once had any syphilitic taint, are apt to attribute the whole diseases of after life, of whatever nature they may be, to a syphilitic cause; and this apprehension or conviction is carried in many cases to such an extent that it is difficult or even impossible to combat it. A gentleman, upwards of sixty years of age, called on me one day, and showed me his hands and arms, which were covered with a well-marked eruption of "psoriasis guttata." I said to him, "You are come to ask me if this eruption is syphilitic, and I tell you at once, without asking a question, that it is not." He replied, "I am glad to hear you say so, and I feel persuaded that it is not, for the opinion you have expressed coincides with others that have been given me by some of the first surgeons and physicians, both in London and on the Continent;" but, continued he, "I showed it to one person, in whom I really had no confidence, who said it possibly might be syphilitic. I must confess, that this opinion makes me uneasy, and I cannot get rid of the idea that it is just possible the disease may be venereal, for I had a sore before I was twenty, and this eruption, which I have had forty years, came on about that time after bathing, whilst I was very hot. My chief object in coming to you, is to beg that you will test the nature of the eruption by some anti-syphilitic remedy, which will set the matter at rest, till when I shall never be easy in mind on the subject." This is not an isolated case; these fears are widely spread in society, and are sources of continual mental uneasiness; in some instances, threatening the minds of the patients, and even determining to acts of suicide. Again, on the other hand, symptoms are frequently syphilitic, which are reputed not so. A gentleman, seventy years of age, called on me and showed me his tongue, which, he said, he feared was cancerous, as he had been told so by three surgeons and one physician. I asked him if he had syphilis lately, and he admitted that he had contracted a chancre within the last two years. I placed him on a course of calomel and opium, with the iodide of potassium and sarsaparilla. The cure of the disease in the tongue was perfect; the patient is now alive, and free from all malady in the tongue.

In attempting to form a diagnosis in reference to the nature of a symptom supposed to be due to secondary syphilis, several points must be taken into consideration.

1. The nature and appearance of the symptom itself.

2. Its history, the date of its appearance; the character, date, and number of primary symptoms which preceded it.

3. The constitution of the patient, what diseases he may have been subject to, and whether any similar symptoms had ever been present prior to the contraction of any syphilitic taint by the patient himself.

4. If, apparently, an isolated symptom be present, other symptoms should be looked for, which may be generally found on close examination and inquiry.

5. If the patient be married, the health of his wife and children should be noted; and, lastly, we may resort to the test of treatment itself. By attention to these circumstances, I think it will generally be found, that we shall be able to make out, in most cases, a correct diagnosis of many secondary syphilitic symptoms, of whose nature we might remain in doubt, after a more cursory or careless examination.

CHAPTER XVI.

OF THE PROGNOSIS OF CONSTITUTIONAL SYPHILIS.

THE prognosis of constitutional syphilis involves many grave questions, besides that of the effect of the disease on the health and life of the patient. The chief points to be considered in the prognosis of constitutional syphilis are the probability of cure, or, in case of marriage, the effect of the disease on the wife or children. It is true that constitutional syphilis rarely terminates fatally, considered in reference to the number who suffer from such disease; but yet where the pustular, or tubercular, or even other forms of disease occur in advanced years, the patient's life is not unfrequently shortened by the exhaustion produced by repeated outbreaks. Where constitutional syphilis terminates fatally, organic changes are not uncommonly met with in the mucous membranes, especially in those of the intestines and larynx, where ulceration is found, and the patient sinks exhausted by diarrhœa, or symptoms resembling laryngeal phthisis; cough with profuse expectoration, and night sweats. At other times the constitutional condition is one of profound cachexia, in which the changes most evident are rather in the humours than in the solid parts of the body. In addition to its direct influence, a syphilitic taint frequently becomes the means of developing latent mischief in various organs, especially in the lungs, and I have, in more than one instance, seen patients die of ordinary phthisis, whilst suffering from syphilitic diseases of the skin and bones.

The ordinary forms of constitutional syphilitic taint do not, however, terminate fatally; neither do they, in a great number of instances, appear to affect the general health of the patient; but a serious question, in reference to the prognosis of constitutional syphilis, is that which relates to its curability, and whether, and at what period, we are capable of pronouncing a patient cured after the disappearance of all external signs of a constitutional syphilitic taint. Some modern writers have denied the curability of constitutional syphilis altogether, and have asserted that the virus "once received into the blood, remains there for years, and possibly, indeed certainly, for the rest of existence."[1] Though there may be some foundation for such a statement, it is too sweeping to be received as an axiom. If secondary syphilis attacks persons of good constitution, under thirty-five years of age, and be properly and perseveringly treated, I believe, in a great majority of instances, that the disease is eradicated, and I found my opinion on the fact, that many persons who have so suffered, have never exhibited any further evidence of syphilitic taint, and their children have also enjoyed the best health. If, again, a constitutional taint make its first appearance over forty, especially in the forms of pustular or tubercular diseases of the skin, although treatment may do much in removing the symptoms of such diseases, it would, perhaps, be going far, to say that they are ever perfectly cured; and I am sure they rarely are, except vapour-bathing be associated with any treatment that may be adopted. This is our sheet-anchor in the treatment of all forms of constitutional syphilis. I differ from those who say, because the symptoms of syphilis have in a few instances returned after the lapse of many years, that constitutional syphilis is actually incurable. Ricord says, "I still persist in not concluding that syphilis is surely and absolutely incurable." Virchow puts this opinion in a much more sensible point of view when he says, "We have no positive sign which permits us to affirm that the patient is cured." I have known a formidable attack of constitutional syphilis after twenty-two years of uninterrupted good health. Cazenave mentions one of thirty years, and Ricord one of forty. These are rare and exceptional cases, and it is just possible that a fresh disease may have been contracted in the interval. I have now for so many years seen so much of syphilis, that I can point to numbers of cases of what I consider perfect cures, where patients have for a great many years been married, and who are the fathers of large families, in whom there is not a vestige or trace of syphilis, nor has there been in periods ranging from ten to twenty years. Dr Faye says ('Edin. Journal,' March, 1860,') "The simplest and surest proof of the cure of syphilis, the true touchstone showing that syphilis is destroyed, should undoubtedly be sought for in those cases where the children of parents who have been syphilitic are born healthy, and do not at a later period become affected with symptoms which can evidently be attributed to the syphilitic dyscrasia." This is the test that I have already given of the probable cure or eradication of syphilis; and, reasoning from these facts, I say that constitutional syphilis can be cured. (See the chapter on Infantile Syphilis.)

---

[1] Erasmus Wilson, on Syphilis, &c., p. 158. Cazenave made the same assertion.

If, again, the symptoms of a syphilitic taint have disappeared from the system for years, the taint may remain latent, and appear in the offspring of such patients, in the various forms of hereditary or congenital syphilis. I could relate many cases of this nature, where, although no external sign betrayed the existence of a taint, still children have been born to such parents, who have exhibited formidable symptoms of syphilis.

CASE XXVIII.

A gentleman married, having been free from the slightest appearance of syphilis for some years prior to his marriage. His lady aborted of her first infant, and also of the second; the third child was born alive, but at six weeks old was attacked with "snuffling," and condylomata round the anus; the eyes were also affected. The lady aborted of the fourth child; the fifth had condylomata and inflamed eyes, with snuffling; and the sixth exhibited the same symptoms soon after birth. The lady had also an ulcerated throat of suspicious appearance, but no other symptom.

Such cases might be multiplied; I have seen many: nevertheless they are rare and exceptional.

CHAPTER XVII.

OF THE STATE OF THE BLOOD IN CONSTITUTIONAL SYPHILIS.

If the blood taken from any part of the body of a patient in an advanced stage of constitutional syphilis be examined microscopically, it will be found to differ widely from healthy blood. The single corpuscles are small and pale, and their circumference often irregular; they are disposed to coalesce and run into irregular and confused masses, in which all trace of the individual corpuscle is lost. They are also very small in quantity, their number in proportion to the other elements being less numerous than in healthy blood. The blood of patients in this state is poor and thin; the corpuscles small or irregular, and much diminished in quantity. This has been termed "deglobulisation" by some modern writers. The diminution of the relative quantity of blood-corpuscles in secondary syphilis is strongly contrasted with the condition of the same fluid in the acute primary forms of the disease, where the globules are full and large, and their number relatively increased.

M. Grassi[1] states that in the advanced stages of the disease the globule is converted into albumen. It is certain that many forms of constitutional syphilis are accompanied by albuminuria. I have seen many cases, and have at the present moment one under my care. M. Waller has succeeded in inoculating with the blood of a patient labouring under constitutional syphilis.[2] MM. Diday and Vidal de Cassis also believe in the contagious properties of blood thus affected.[3]

Of course the conditions of the blood I have just alluded to will present infinite varieties, dependent on the age and constitution of the patient, and the length of time the disease has been in the system. My observations have been made at all ages; but the descriptions I have now given have been taken from the blood of patients upwards of forty years of age, where the disease had existed some years.

---

[1] 'Gazette Médicale,' 1850, p. 200.

[2] Op. cit.

[3] See Vidal de Cassis, op. cit., p. 268, &c.

The blood-disc taken from patients debilitated and exhausted by an old venereal taint does not long retain its characteristic shape. It is well known that the healthy blood-disc, dried on a piece of glass, retains its shape and character for a length of time, and may be preserved in this way for the purposes of demonstration; but the blood-disc of constitutional syphilis, if examined a few days after being drawn from the patient, has completely disappeared, and nothing but a red cloud is perceived, produced by the dissolution of the disc, and showing the profound alteration the blood undergoes in advances stages of the disease.[1]

---

[1] The researches of M. Grassi, Apothecary to the Hôtel-Dieu, on the blood of patients affected with indurated chancres, show that there is a marked diminution in the globules, and an increase in the albumen of the blood, whilst the fibrine appears to undergo little or no change. M. Grassi also states another remarkable fact, that the globules rapidly increase under the exhibition of the iodide of potassium. (See M. Fournier's note to Ricord's 'Lectures on Chancre.') Of course, if the blood be examined at various periods and states of syphilis, it will be found, as it has been found, in very variable conditions. The blood of a patient in good health, recently affected with indurated chancre, is in a very different condition to that of one who has been suffering for long periods from pustular or tubercular syphilis. Hence Virchow has described three various conditions of the blood, in the various forms and states of constitutional syphilis; these are pretty much the same as those I have already mentioned. These changes consist in a diminution of the globules, as in the earlier stages of secondary syphilis; in an increase of the white corpuscles, a state of leucocythemia, seen in the more advanced stages of the disease; and a watery condition, "hydremia," mostly observed in tertiary syphilis, with change of structure in internal organs, especially the viscera of the abdomen.

CHAPTER XVIII.

OF THE PARTICULAR SYMPTOMS OF CONSTITUTIONAL SYPHILIS. OF SYPHILITIC DISEASES OF THE SKIN—SYPHILIDA.

SYPHILITIC diseases of the skin may be referred to nine principal groups: 1, Exanthemata; 2, Squamæ; 3, Vesiculæ; 4, Pustulæ; 5, Papulæ; 6, Tubercula; 7, Ulcers of various kinds and in various situations, many the consequences or necessary results of many of the preceding forms; 8, Vegetations, warts, condylomata, or mucous tubercles; and 9, Maculæ, or syphilitic stains of the skin.

OF THE SYPHILITIC EXANTHEMATA.[1]

The syphilitic exanthemata generally make their appearance under the form of irregular patches, of a shining copper or bronze colour, at the onset of the disease; if there be much accompanying fever, they are more inclined to redness, and the bronze or copper colour is not marked till the inflammation and fever have disappeared. Occasionally this form of disease commences in red patches, spread more or less extensively over the body; these patches vary in dimensions from the size of a sixpence to that of a shilling; they are not elevated and solid like the papulæ, and have no apex or centre containing either lymph or pus. They are commonly accompanied by fever, and but for the coexistence or immediate precedence of primary sores might be mistaken for an eruption dependent upon other causes. They very commonly appear before the primary symptoms have disappeared. When they are dying, the top is commonly covered with a thin dry scurf or scale. They are sometimes accompanied by papulæ and other forms of constitutional syphilis, as superficial redness or ulceration of the fauces, and are frequently succeeded by the squamous or tuberculous forms of disease. These eruptions frequently accompany the primary forms of syphilis.

---

[1] *Synonyms and Varieties.*—Roseola syphilitica, and papulous erythema. (Cazenave, on the Syphilida, p. 226.)

They demand, in the first instance, if there be much symptomatic fever, an antiphlogistic treatment, and the warm bath; afterwards, if they are rebellious, the iodide, biniodide, or bichloride of mercury, with sudorifics and the mercurial vapour bath. This is the form of skin disease which frequently accompanies an acute gonorrhœa, or comes on when it has been suddenly suppressed in its early stages. The ordinary forms of roseola generally occur early in the history of a venereal taint; but there are cases where eruptions which belong to the exanthematic form are chronic, and appear at varied intervals after primary diseases. I have seen cases where they occurred two years and ten years after the primary disease. In these instances, the affection of the skin consisted of circular red patches, fading into a brown colour, and covered with a thin, dry scurf, not a scale. After a long period, in some of the spots, the scurf became a scale, and gradually thickened, so as almost to appear like lepra or psoriasis; diseases from which, however, roseola is essentially different.

These spots of chronic roseola, at first red, gradually fade into a pale, shining copper colour, and frequently, at last, die away into a yellow stain of the skin, which remains for a long period of time, and sometimes cannot be removed at all.

The treatment, which is almost always successful in these cases, consists of a milk diet, minute doses of the bichloride or biniodide of mercury, not exceeding the twentieth of a grain for a dose, and the mercurial vapour bath three times a week.

OF THE SYPHILITIC SQUAMÆ.

The squamæ are particles of thickened epidermis, become hard, dull, and opaque, and elevated above the surrounding skin by a morbid condition of the subjacent dermis, or simply of the rete mucosum. This disease is essentially chronic, and does not generally succeed to any febrile condition of the economy. The syphilitic squamæ generally appear in the form of patches, more or less diffused, varying from the size of a sixpence to that of a half-crown; the centre of these patches is frequently depressed; they are of a red copper colour, changing ultimately to a dull brown, or even black, which is a long time in disappearing. I apply the term, squamous, or scaly syphilitic disease of the skin, to that form which is scaly from the commencement; it is to be distinguished from other diseases, such as roseola, papules, or pustules, which either become covered with a dry dandriff, as roseola; a slight ulcer with a scab, as papules on the decline, or a crust which covers a ruptured pustule: these are not scaly diseases, properly so called, and the distinction should be well made, as the scaly disease is that which has been called "true syphilis," although it is not more truly syphilitic than a pustule or a tubercle, and not half so formidable in its consequences or results.

The scaly syphilitic eruption consists of thick, dry scales, adhering firmly to the skin, and resting upon a red, elevated surface, the scales being continually renewed when shed; those portions of the skin on which the scales are placed present a well-marked thickening, and are thicker as the disease has been longer in existence.

The scaly disease appears under various forms; as a ring, a spot (guttata), an irregular ring, like the track of a snail (gyrata); sometimes the scales are black, at other times of a shiny or pearl-like whiteness, and sometimes, when affecting the palms of the hands, as thick as horn in old cases.

Scaly syphilitic eruptions may be confounded with other scaly diseases of the skin not syphilitic, as the ordinary forms of lepra, or psoriasis; they may be confounded, again, with other syphilitic eruptions, which assume an appearance of scaliness on their decline; some forms of papules (lichen), when the papules are large, resemble it very closely. On the hands the disease may be mistaken for grocers' or bakers' itch; and this is not unlikely, as the horny or scaly syphilis of the palms of the hands, and joints of the fingers, very commonly occurs as an isolated symptom of constitutional syphilis.

Scaly diseases occur at various periods after primary infection, sometimes as early as three months, in other cases much later; there is no rule on this point. They sometimes succeed to other forms of skin disease, as papules, or vesicles, and frequently occur again under the same form when they have been apparently cured, a fact peculiar to the scaly disease, for papules, vesicles, or pustules, rarely occur twice; if another attack of skin disease succeeds, it is generally, if not always, under another form.

The syphilitic squamæ have a tendency to excoriate, or ulcerate slightly in the centre, which then becomes covered by a small, dry, thick crust; occasionally, also, their surface is traversed by fissures, when there does not exist any apparent ulceration. After the cure of the disease, the dermis remains depressed in the parts corresponding to the centre of the squamous patches. The other symptoms of constitutional syphilis, with which the squamæ are commonly associated, are inflammations and ulcerations of the fauces and palate, and pains and diseases of the periosteum and bones.

As the syphilitic squamæ are not generally accompanied by vascular excitement or fever, an antiphlogistic treatment is rarely indicated. Sudorifics, as the decoction of sarsaparilla, or the preparations of Zittman or Feltz, with the carbonate of ammonia and the mercurial vapour-bath, are generally successful. The bichloride or biniodide of mercury, or mercurial frictions, are the best remedies when mercurials are indicated. The preparations of arsenic are useful in some forms of disease, particularly those which succeed to primary diseases which have been fully treated by mercury. Biett relates a case of this character speedily cured by the liquor arsenicalis, and the arseniate of soda, after the failure of other measures. Over true scaly diseases the iodides have very little influence.

Psoriasis palmaris, or syphilitic lepra of the hands and feet, frequently occurs as an isolated symptom of constitutional syphilis; or, if associated with other symptoms, it is frequently the most prominent. In this disease the hands are covered with thick, horny scales; in other places the epidermis is dry and harsh; the joints of the fingers externally are dry, crack, and ulcerate. Sometimes the lepra occurs in round, thick patches, of irregular shape, but always affecting the palmar surface of the hand, and the sides and soles of the feet. The hands are hot and stiff. These symptoms are tedious and difficult of cure; they require local as well as general treatment; in addition to that recommended for lepra generally, they require local management. Poultices to soften the soles, and frictions with ointments composed of iodine[1] or mercury,[2] are very useful. The scales when softened may be touched with strong nitric acid, or the liquor hydrargyri pernitratis.

OF THE SYPHILITIC VESICULÆ.

The vesiculæ are the most rare of all the syphilida. M. Biett had only seen a few examples of it. Cazenave says that he published the first account in 1828. The disease is characterised by vesicles seated upon an inflamed base, of a deep copper-coloured red; they are indolent, and remain stationary much longer than eruptions of the same character not having a venereal origin. Some of them shrink up, and are transformed into grey, squamous crusts; others disappear and leave behind them on the skin where they are situated a brown mark. They are accompanied by some degree of fever, inflammation of the fauces and palate, and other symptoms of secondary syphilis. I have seen several examples of this form of secondary venereal disease of the skin, which is not, perhaps, so rare as might at first be imagined, as the vesicles soon rupture, shrink, and are transformed into little crusts or scabs, which look like lichen, or lepra. An error in diagnosis might be very easily committed, both as regards the form of syphilitic eruption, and the nature of the eruption itself, whether syphilitic or not, especially if there be no other concomitant symptom of secondary syphilis.

[1] ℞ Unguent. picis,
Unguent. plumbi iodidi, āā ℥j. M.

[2] ℞ Unguent. hydrarg. nitratis,
Adipis ppt., āā ℥j;
Glycerinæ opt., ʒij. M.

℞ Hyd. nit. oxyd. (levigati), ʒj;
Unguent. zinci, ℥ij;
Glycerinæ, ʒij;
Kreasoti, ♏x.
M. ft. unguent.

Case XXIX.

A. B. had suffered from well-marked indurated chancre, and an ulcerated throat, very rebellious to treatment. He was attacked with a crop of vesicles on the cheek, precisely similar to the vesicles of ordinary herpes; coinciding with these he had some spots of lepra on the body, and superficial ulceration of the soft palate. The vesicles, the lepra, and the ulcerated throat, were all present together. The vesicles soon ruptured, and were converted into a thick, brown scab, which covered superficial ulcers; these, when healed, left slight depressions in the skin.

The syphilitic vesiculæ are commonly preceded by other forms of skin disease, which they replace. I have seen the vesicle preceded by roseola, and replaced by a pure scaly disease; thus corroborating a former remark, that with the exception of scaly diseases, the syphilida are seldom reproduced under the same form.

Vesicles on the penis, whether venereal or not, sometimes accompany primary diseases.[1] I have seen one case in which, three days after the appearance of a gonorrhœa, the skin of the penis was covered with a crop of vesicles, from which the patient had never suffered before. Cazenave (p. 266) believes these symptoms to be syphilitic. Vidal de Cassis states that he has succeeded in inoculating the syphilitic vesicle, by which inoculation a similar disease was produced (p. 343). Pemphigus and rupia belong also to the class of vesicular syphilitic diseases of the skin: the former has as yet been chiefly observed in infants; it consists in an eruption of large vesicles filled with a straw-coloured serum, and may or may not be associated with other symptoms of constitutional syphilis. (See the chapter on Infantile Syphilis.) In rupia the vesicles are large and dark-coloured, filled with a dark or blood-coloured serum; they become covered with a laminated and elevated dark or black crust, unlike the crust of ecthyma, which is flat. These crusts cover ulcerations more or less deep, and in various conditions.

---

[1] These must not be confounded with simple "herpes præputialis."

They may coexist with various other syphilitic symptoms, especially secondary phagedena of the throat. What is said with regard to treatment, when speaking of the ecthymatous pustule, its crust and ulceration, finds its application here.

OF THE SYPHILITIC PUSTULÆ.

Pustules are characterised by an elevation of the epidermis, raised by a collection of pus secreted by a circumscribed portion of inflamed skin. The syphilitic pustulæ are frequently complicated with tubercles, and the pustules themselves commonly placed upon a tuberculous base. The pustules are again occasionally associated with papulæ, but are rarely complicated either with squamous or exanthematous affections. The syphilitic pustulæ frequently ulcerate, and give place to a sore of characteristic appearance, with hard and elevated edges, and a foul surface, secreting a sanious pus. Unlike other pustular diseases of the skin, the syphilitic pustule follows no regular course; they are developed slowly, and remain stationary for a longer or shorter period, frequently for many weeks, or till an appropriate treatment be adopted. They are situated upon a hard raised base, of a deep brown or copper red; this colour is better marked when they have continued some time, than in the commencement of disease. The syphilitic pustulæ strictly belong to that class of affections which are termed secondary, but are sometimes observed to coexist with a primary venereal sore; they are, under these circumstances, developed upon the skin of the penis, the scrotum, the pubes, or the labia; they are placed upon a red indurated base, soon burst, and change into foul and spreading ulcers.

Pustular syphilis is characterised by the eruption of pustules of various sizes, over a greater or less extent of the whole surface of the body, rarely accompanied by any symptomatic fever. It is sometimes confounded with other forms of skin disease, not venereal. On the face I have known it mistaken for acne, especially when the pustules are small, and I have also in more than one instance seen it mistaken for smallpox. Pustular secondary syphilis assumes several forms: in one form the pustules are small and numerous; this has been termed the lenticular or miliary pustule: in a second form the pustules are larger and not so numerous; and in the third form we have large single pustules, irregularly disposed, but not numerous; the patient may have from ten to twenty of these pustules, in different stages, on various parts of the body. The secondary syphilitic pustule is a very common form of constitutional syphilis. It generally occurs from six to twelve months after the primary poisoning, but I have seen cases, one now in the hospital, where a well-marked pustular eruption occurred before the primary sore was healed; and again, I have known well-authenticated cases, where pustular syphilis has occurred ten, twelve, twenty-seven, and thirty years after a primary infection. It is difficult to explain these facts, which I state from my own experience, and in which I am borne out by M. Cazenave;[1] of their truth there can be no doubt.

The syphilitic pustule runs a very marked and peculiar course, and I will take a medium-sized pustule for the purpose of illustrating the history of this course, because the progress I am about to mention is not so well marked, either in a very small pustule or a very large one. When the syphilitic pustule first appears on the skin, it consists of a portion of epidermis raised by a small quantity of pus, but the disease remains a very short time in this state, sometimes only a few hours, at most not more than a few days; the pustule becomes ruptured, the pus exudes on the surface of the pustule, which shrinks and dries up.

In the first form (the lenticular), the pustules commence in small, red, elevated spots, spread more or less over the face, trunk, and extremities; these spots suppurate at the apex, and each spot contains a drop of matter about the size of a large pin's head; the pustule soon breaks, the pus exudes and dries on the surface of the pustule, each of which is then covered with a small crust, slightly depressed in the centre. On the face these pustules very much resemble "acne."

In the second form the pustules are larger, about the size of a pea or the smallpox pustule; these soon break, and become covered with a thin, flat, or conical crust. If the pustules are few and isolated, the crusts are circular; but if near together, the crusts run into each other and assume an irregular form. The disease in this stage has been denominated "pustulo-crustaceous." We may see the pustule, before it has broken, surrounded by a narrow, red or livid areola, or the circular crust where the pustule has ruptured and the pus dried up, or confluent and irregular where the pustules have been near together.

---

[1] 'Traité des Syphilides.'

The crust covers an ulcer which, when the former is detached, may be found in varied conditions, either healthy and disposed to heal, deep and sloughy with indurated edges, or even phagedenic. These are secondary venereal ulcers, succeeding to the rupture of the pustule. The ulcer may heal under the crust of the pustule, which is a very common circumstance; but when it does so, it leaves behind it a red cicatrix always more or less depressed in the substance of the skin. If the pustule have been placed on the forehead, and have been large and long in existence, the surface of the bone is always more or less absorbed, and a well-marked depression exists in it long after the ulcer has healed, and the skin has recovered its natural appearance. Till a proper treatment has been adopted, the venereal pustule keeps constantly forming on the skin for long periods, and thus we commonly see the pustule, the crust, the ulcer, the depressed and red cicatrix, all present in the skin at the same time, giving the malady the appearance of a compound skin disease.

In pustular secondary syphilis, then, we have four distinct forms of local mischief, the pustule, the crust, the ulcer, and the depressed and coloured cicatrix; and in the advanced stages of the disease it almost invariably happens that all these conditions are present on the skin at the same time. In many forms of pustular syphilis, particularly the first two, the constitutional disturbance is not so great as the extent of the local malady would lead us to expect; thus in many cases the general health is little disturbed. But there are other instances in which the constitutional disturbance is so great as to put the life of the patient in imminent danger. All the forms of pustular constitutional syphilis are formidable diseases, and indicate a profound and complete contamination of the system by the syphilitic virus. In the second and third forms, the general health suffers more or less, and a fatal termination may ensue, in which a general breaking up of the constitution takes place, preceded by diarrhœa and profuse night perspirations. Happily, however, under a proper treatment, this is not often the case.

Pustular syphilis is formidable again, from the marks and depressions left on the skin and on the surfaces of the flat bones by the cicatrices of the ulcers to which it gives rise, which may be frequently avoided if the patient is treated early, and before the rupture of the pustule; it is commonly the forerunner of, if it be not accompanied by tubercles and diseases of the bones. Pains in the bones, nodes, and periostoses, commonly complicate pustular syphilis, particularly where the pustules are simple and large. It must be quite evident that the stages of pustular syphilis are so numerous, its complications and pathology so varied, and the conditions of the general health under which it is met with so different, that no specific treatment can be in any way applicable to pustular syphilis, considered as a mere secondary venereal disease. It must be quite clear that the treatment of the miliary or impetigenous pustule in a patient in good health must totally differ from that we should adopt in one suffering from ecythma, where the habit is weak and the health bad, and yet they are both pustular secondary syphilis.

The remedies best suited to the pustular forms of syphilis must be varied to suit the different forms of the eruption, the state of the general health, and the age of the patient. Mercurials, or the iodides of potass, soda, ammonium, or iron, may all find their application in different cases. The mercurial vapour bath may be employed in almost all the forms of the disease. After two or three days' treatment by it, we perceive that no more pustules appear; the disposition to their formation is for the time arrested; the red or copper-coloured ring round the pustules that are covered with crusts, looks less livid, and the eruption looks more dead; after a time, the crusts begin to drop off, and we find in many places, where they formed the covering to ulcers, that these ulcers have healed, and that there is a red cicatrix only, marking the site of the previously existing ulcer. This cicatrix very commonly is depressed more or less in the skin, forming a pit not unlike that left by the pustules of smallpox. The crust is the best dressing to the ulcers underneath, under ordinary circumstances; and this is proved by the crusts adhering till the ulcer has healed under a proper constitutional treatment, and then falling off. If, however, the ulcers are unhealthy, and disposed to spread, we find drops of pus exuding through the crust, or the crust falls, leaving the sore underneath in very various conditions. To these sores various applications may be used. I generally poultice them, if foul, for a day or two, then wash them with a little black wash, and cover them with collodion, or the solution of gutta-percha in chloroform, suggested by Dr Graves, of Dublin. If they secrete much, they may be dusted with starch and calomel; ointments are generally unsuited to these ulcers, and under ordinary conditions the collodion or gutta-percha dressing, to defend them from friction and atmospheric influence, answers very well.

Treatment should be followed for a month or six weeks, and at the end of that time we shall find that the symptoms of pustular syphilis have disappeared, with the exception, probably, of the red stains left on the site of the ulcers. If they have been deep, it is some time before this redness altogether subsides, perhaps two months, or even three, or more, according to the severity of the attack. Treatment should not be given up, although it should be modified, till all the redness left on the skin has given way. If the destruction of parts by the ulceration has been great, the skin is far from presenting its original healthy appearance; it remains puckered, and uneven in places, resembling the appearance of the cicatrices produced by a burn.

CASE XXX.

S. R. was admitted into the Queen's Hospital, on March 30, 1849, with twenty-eight or thirty large pustules, in various stages, on different parts of the body; constituting the disease known as syphilitic "ecthyma." In this patient the constitution had been nearly destroyed by the irritation of the disease. When admitted, he presented an illustration of the last stage of syphilitic cachexia. He could not stand; the extremities were œdematous, night perspirations profuse, and pain in the bones of the head and legs very severe. There were seven or eight large secondary ulcers, of foul character, on the head, arms, and legs, which had resulted from the rupture of the pustules; and in two places were pustules recently formed, which offered a good illustration of their commencement. The epidermis was raised by a purulent collection, of the size of a shilling, the covering of which was very thin, the pustule itself surrounded by a deep livid-coloured areola; the skin on which the pustule rested was not indurated. This patient found great benefit from large doses of opium, an admirable anti-syphilitic in such states.

I have employed opium very largely in the advanced stages of constitutional syphilitic diseases. Opium has, by a number of authorities, been extolled as a remedy of great value in many forms of secondary syphilis, and its administration by some surgeons has been carried to the extent of twenty or thirty grains a day. Opium is indicated where the health has been broken by mercury and syphilis, and its administration is almost always followed by satisfactory results. It is of especial use where the nights are bad, and the patient emaciated and feeble, where a general irritability, the result of mercury and disease, appears to be wearing the patient out. In such cases opium, in large doses, acts almost magically. In many instances it may be advantageously combined with other remedies, to suit the exigencies of any particular case. I am in the habit of prescribing it, combined with guaiacum, with very good results.

Opium, the warm bath, appropriate dressings to the secondary ulcers produced by the rupture of the pustules, and decoctions of the woods, especially guiacum, are the first remedies to be employed in such states as those to which I have just alluded. As the patient improves, the mercurial vapour bath must be used, and the iodide of iron given. There may be many other syphilitic symptoms present with the pustular disease of the skin and its consequences. Pustules are commonly complicated with tubercles, tophi, and almost always, in advanced forms, with pains or diseases in the bones. Such states, of course, require modifications in the treatment suited to the exigencies of each particular case. The large pustules of ecthyma are commonly covered with thick black crusts after they are ruptured, especially in constitutions which are naturally feeble, or in systems broken down by intemperance and debauchery. This condition is frequently termed rupia; it differs, however, from that disease. Rupia is a bullous, not a pustular disease. The pustulo-crustaceous disease with black crusts is one of the most formidable varieties of secondary syphilis; it is commonly fatal, either by the exhaustion which it produces, or by the production of diseases in other organs, especially the throat, pharynx, œsophagus, or windpipe.

OF THE SYPHILITIC PAPULÆ.

The papulæ are small, solid, hard elevations upon the skin containing neither lymph nor pus, surrounded by a small inflamed areola, having frequently ulcerations at their apices, which then become covered with small, dry incrustations. The syphilitic papulæ are more or less disseminated over the body, arranged in groups, or disposed to be confluent. They are distinguished by their deep red or copper colour, their tendency to ulcerate, and to form hard incrustations on their surfaces, which, falling off when the ulcer has healed, leave brown, copper-coloured, depressed cicatrices in the skin. The papulæ are commonly associated with pustules, tubercles, or squamæ; and are almost always accompanied by syphilitic iritis, ulcers of the mouth and fauces, diseases of the bones or periosteum, nocturnal pains, or other symptoms of confirmed constitutional syphilis. This affection of the skin sometimes accompanies primary symptoms; when it does so, it assumes a more or less acute form, and is attended with some fever.

This variety of disease has been termed venereal itch, "scabies venerea," on account of the irritation the papulæ occasion when they are seated on certain parts of the body. It sometimes attacks the labia, principally on their external surface, the orifice of the vagina, and the clitoris, which parts, on examination, are found covered with small papulæ of a deep red colour, causing an intolerable itching, principally in the night; the eruption sometimes extends to the arms and internal parts of the thighs. Mercurial ointments commonly allay the irritation.

If the papulæ assume an acute or subacute form, they must be treated, at first, on the antiphlogistic plan, and a regulated diet must be observed. Should they succeed to primary symptoms which have not been treated by mercury, this remedy may be employed: fumigations have a marked effect in allaying the irritation by which they are accompanied; weak solutions of the bichloride of mercury may likewise be used, to sponge the surface of the skin affected with syphilitic papulæ. The mercurial vapour bath is also of essential service.

OF THE SYPHILITIC TUBERCULA.

Syphilitic tubercles of the skin are deep-seated, solid, circumscribed elevations, containing neither lymph nor pus; they differ from the papulæ in their size, being much larger, more prominent, and better defined. Syphilitic tubercles are either isolated or grouped, of a shining red, livid, or brown colour, surrounded by an areola of a dark red or coppery appearance. These tubercles are prone to ulcerate, and form excavated sores with thick and elevated edges, and a foul surface, secreting an offensive pus, which, drying up, is transformed into grey or dark-coloured scabs or crusts. The syphilitic tubercle forms the link of connection between the secondary and tertiary symptoms; it is the first of that class of syphilitic diseases in which the virus appears to have penetrated more deeply into the economy, and to have produced a disorganisation in tissues, which those forms hitherto considered have left untouched.

The flat tubercle of M. Cullerier, or the tuberculous pustule of Alibert, sometimes occurs as a primitive affection, but more commonly as a symptom of constitutional syphilis; in the former instance it is observed on the scrotum, the labia, the vicinity of the anus, or the mammæ. The surface of these tubercles is smooth and flat, or granulated, of a deep red or copper colour, varying from the size of a sixpence to that of a shilling; they are not so much disposed to ulcerate as the other varieties.

The more common forms of tubercle are conical or round elevations, dispersed here and there over the skin, or assembled in groups or clusters, which are also irregularly distributed. The size of these varies from that of a pea to that of a large hazel-nut or filbert; they are more commonly situated on the anterior surface of the chest or the abdomen, on the neck, the face, or the internal part of the arms.

Another variety of tubercle is situated, more commonly, on the alæ or lobule of the nose, or on the forehead; frequently, also, upon the neck of the uterus, or upon the tongue, where they may be mistaken for cancerous affections. These tubercles are commonly assembled in circular groups of variable size; they are so prome to ulcerate, that this termination appears to be one of their natural characters; when in this condition, they are frequently described under the name of syphilitic lupus. The tubercular syphilida are commonly complicated with a scrofulous, scorbutic, or herpetic tendency or diathesis; their progress is slow, and generally without pain; they gradually increase in size till they terminate in softening or ulceration. They are the most formidable of all the forms of constitutional syphilis, producing great deformity in all the parts invaded by the ulceration.

Whilst the tubercles are in a state of induration, and as yet neither ulcerated nor softened, their resolution may be attempted. For this purpose, the iodide of mercury, with the iodide of potassium, may be employed: it must be remembered, however, before any plan of treatment is framed, that due attention be paid to the general health of the patient.

If there be no contra-indication, the treatment may be commenced by administering a pill of the iodide of mercury daily, containing one grain of the salt and a solution of the iodide of potassium, at first administered in doses of ten grains in the day. On the fifth day, two pills are given, and the quantity of the iodide of potassium is increased; it is generally unnecessary to carry the dose of mercury to any extent, or to continue its use very long; the treatment is to be completed by the iodide of potassium. The indurated tubercle is commonly resolved by this treatment, leaving behind it, in the skin, merely a depression of a brown or copper colour, more or less deep.

The mercurial vapour bath is also exceedingly useful, whilst the tubercles are yet unsoftened, in procuring their resolution; it may be employed with the iodide of potassium and sarsaparilla.

Case XXXI.

A gentleman contracted syphilis in a warm climate in 1857. This was followed by a formidable attack of pustular syphilis, which disappeared under treatment. When the treatment had been discontinued for a little time, a fresh pustular disease of the skin made its appearance, which was treated by the iodides of mercury; it yielded but slowly and imperfectly to the treatment. He was now sent to England, to be placed under my care. When I first saw him, he had four different varieties of skin diseases, amongst which the tubercle was the most prominent. 1, Dark copper-coloured marks left by the healing of old ulcers. 2, Red puckered cicatrices, due to the same cause. 3, Large foul ulcer, covered with white sloughs. 4, Tubercles not yet softened; they consisted in large, hard, red, globular or oval swellings, varying in size from a pea to that of a marble or walnut; they were situated on the neck, arms, and trunk, to the number of forty-five or fifty. He had also nodes on the tibia, and severe nocturnal pains. I placed this patient on the following plan:—Large doses of opium at night; the mercurial vapour bath four or five times a week; and the iodide of sodium, with iodide of iron and sarsaparilla. In sixteen days the ulcers had all soundly healed, and the old cicatrices were less red. In two months nearly all the tubercles had disappeared, and the nodes and nocturnal pains were gone. He was now directed to go to the coast for a few months, and then to return and resume the treatment for a month. This was done. At the present moment there are no symptoms of syphilis. I saw the patient three months ago, fat, and in good health and spirits.

I mention this case as one of the most formidable attacks of constitutional syphilis I have ever seen, and as exhibiting the general treatment of the syphilitic tubercle.

As syphilitic tubercles are accompanied by a process of inflammation, under the increase of which they soften and ulcerate, a local treatment, whilst they are in a state of induration, is of vast service in assisting the internal treatment in their resolution. For this purpose, cooling lotions may be employed, or fomentations of poppy, henbane, or aqueous solutions of opium. Blisters are also very useful.

In the ulcerated forms of tubercles, all that has been said on the treatment of primary venereal sores may be referred to with advantage, since these secondary ulcerations require nearly the same local treatment, the use of the nitrate of silver, the aromatic wine, with astringents, sedatives, narcotics, or digestive ointments, or a local antiphlogistic treatment, according to the aspect of the sore. When caustics are indicated, the surface of the ulcers may be touched with the acid nitrate of mercury; the ulcers cicatrize rapidly under its application; the separation of the crusts or eschars may be facilitated by the warm or mercurial vapour bath.

The iodides of potassium, sodium, and iron, with decoctions of the woods, are excellent remedies during the ulcerating stages of tubercle; mercurials also may be used in certain states; the iodide, the biniodide, or the mercurial vapour bath, with sarsaparilla and cinchona, are the best remedies.

OF SYPHILITIC STAINS OF THE SKIN.[1]

The various forms of syphilitic diseases of the skin which I have just described are frequently followed or accompanied by alterations of its colour, without any other pathological change. These stains are generally circular in form, and either distinct, single and round, or placed in groups or clusters; or, again, consisting of a mere mottled appearance. They vary in colour, from a deep brown to a bright or a dirty yellow, and in places the skin appears as though it had not been washed clean. These spots sometimes appear on the site of previously existing diseases of the skin, or on parts which have never been affected.

---

[1] *Synonyms.*—Maculæ syphiliticæ—Taches.

They do not disappear under pressure with the finger, they give rise to no irritation, and never ulcerate, or terminate in vesicle, papule, or pustule; they consist simply in an alteration of the colour of the pigment. They commonly last for years, or through the whole of life. I have succeeded in curing some forms by the mercurial vapour bath, but I have seen others which have resisted all modes of treatment. The general health is rarely disturbed in the majority of cases.

ON CONSTITUTIONAL OR SECONDARY VENEREAL ULCERS OF THE SKIN.

Secondary venereal ulcers are most commonly a consequence of other diseases of the skin, which have immediately preceded them; thus, the ruptured vesicle, or pustule, or the softened tubercle, naturally produces an ulcer; there are, however, some rare forms of secondary ulceration which are not preceded by any of the diseases I have mentioned, or, in fact, by any apparent disease. The sites of primary sores not unfrequently become the seat of secondary ulcers, which appear long after the healing of the primary sores, and which are doubtless due to a constitutional taint. M. Cazenave mentions some very curious examples of this nature, where an accident, a wound, the application of a blister, or a relay of leeches, has been succeeded by constitutional syphilitic ulcers, and where no other evidence of a constitutional taint could be discovered. Mr Paget ('Lectures on Surgical Pathology,' vol. i., p. 492,) mentions a case where a gentleman who, for not less than five years after a syphilitic affection of the testicle, had no sign of syphilis, except that of general feeble health; but he accidentally struck his nose severely, and at once a well-marked syphilitic disease of its bones ensued. In another case, syphilitic disease of the skull followed an injury of the head.

CASE XXXII.

A collier was admitted into the Queen's Hospital, whose nose had been injured by the fall of some coals upon it; he had suffered from syphilis eight years before. Caries and exfoliation of the nasal bones, which ended in their total destruction, succeeded to the blow, and this was followed by secondary phagedena of the fauces. To these ulcers an ointment of bismuth and lard is a good application: an ounce of prepared lard, and as much of the trisnitrate of bismuth as can be incorporated with the lard.

I have already alluded to the operation of this law of proximate causes in the development of secondary syphilis, when speaking of the sylphilida generally.

CHAPTER XIX.

OF SYPHILITIC TUMOURS OF THE SKIN AND THE SUBCUTANEOUS CELLULAR TISSUE.[1]

ISOLATED, hard swellings, varying in size from a horse-bean to a swan's egg, form on different parts of the skin in the advanced stages of many forms of constitutional syphilis. These swellings are at first moveable, and the skin covering them not altered in appearance. In the advanced stages the tumour becomes adherent to the integument covering it, which inflames and ulcerates in one or more places, giving vent to the contents of the tumour, which softens and suppurates, discharges an offensive sanies, or quantities of brown or black sloughs: the ulceration spreads till the whole skin covering the tumour is destroyed; we have then a deep, foul ulcer, filled with a black slough, and sometimes an inch or two deep, the skin surrounding which is of a livid red colour, and the edges ragged, everted, and hard.

These tumours, unlike the ordinary syphilitic tubercle, which in many respects they very much resemble, appear rather to spring from the subcutaneous cellular tissue than from the skin itself, for it is not till the more advanced periods of the disease that the skin is involved: they generally appear on the extremities. I have seen these tumours on the fore-arm, the external condyle of the humerus, on the inner part of the leg, on the external ham-string, and other parts of the upper and lower limbs; they are rarely placed on the face or the trunk, though occasionally met with in these situations. They may be confounded with the ordinary syphilitic tubercle, or when occurring as an isolated symptom, (which they rarely do,) with tumours arising from other causes, or even with common phlegmon, or chronic abscesses, particularly those of a strumous character; the diagnosis in such cases is important, as the syphilitic tumour, when softening, or in that stage which resembles a common abscess, should never be opened or punctured.

---

[1] Tumeurs gommeuses—Gummata.

The syphilitic tumour occurs late in the history of a syphilitic taint, and generally many years after its primary cause; it has generally been preceded, at no long period, by other symptoms which render its nature certain. It is also frequently associated with pains, or diseases of the bones, pustules, tubercles, or secondary venereal ulcers which have succeeded to the detachment of the crusts of ruptured pustules or ulcerated tubercles. In its earlier stages, the resolution of this tumour should always be attempted; and this may generally be accomplished by appropriate treatment, if the process of softening have not proceeded too far. If the tumour be seen in its earlier stages, before the skin has become implicated, local treatment is of essential service: the most efficient remedies are blisters, frequently repeated, and dressed with mercurial ointment, or the compound iodine ointment; next in efficiency is pressure by means of discutient plasters, composed of belladonna, iodine, or mercury. The emplast. de Vigo, with mercury, also answers very well. Some writers have recommended extirpation with the knife,[1] an absurdity too great to require a serious refutation. The internal treatment should consist of the administration of the iodides of mercury, potass, or iron, either alone or in a state of combination. The mercurial vapour bath also assists powerfully in the resolution of the tumour; it should be used twice or three times in the week.

If the skin covering the tumour has become thin, and is of a deep red or livid colour, we shall hardly succeed in dispersing the tumour; in this diseased integument one or two small spots of ulceration soon appear, which spread rapidly till the whole covering of the tumour is destroyed. When this is the case, we have to deal with a secondary syphilitic ulcer, frequently of very formidable character, which has penetrated sometimes to a very great depth in the soft parts, having destroyed the fascia, and laid bare the muscles if situated on the soft parts of the extremities, or if over bones, having produced caries, necrosis, or absorption of the bony tissue to a greater or less depth. In such cases the constitutional treatment is still our chief reliance, but the local aspect of the sore will require a treatment suited to its varied aspects; should it become phagedenic, which it sometimes does, it must be treated on the principles laid down in the chapter on that subject. Generally, after the surface has become clean, black wash, weak lotions of dilute nitric acid, or of kreasote, in the proportion of twenty minims to the half-pint, answer very well, and better than ointments; although the latter are sometimes serviceable,[1] these ulcerations require, from time to time, superficial cauterisation, with the nitrate of silver, or the liquor hydrargyri pernitratis.

---

[1] See Vidal de Cassis, p. 446.

[1] ℞ Unguent. hydrarg. nitratis, ʒss;
Ung. zinci, ℥jss. M.
Or,
℞ Ung. hyd. nit. oxyd., ℥ss;
Ung. elemi, ℥jss. M.

CHAPTER XX.

ON SYPHILITIC AFFECTIONS OF THE APPENDAGES OF THE SKIN.

ALOPECIA.—LOSS OF THE HAIR FROM SYPHILITIC CAUSES.

It not unfrequently happens, that whilst other symptoms of constitutional syphilis are present in the system, the hair of the head becomes thin and falls off rapidly; and so slight is its adhesion to the scalp, that it comes off in large quantities when the hand is merely passed through it. This loss of hair is not confined to the head; it affects the whiskers, the beard, the eyebrows, eyelashes, and even the hair on other parts. The loss of hair is sometimes partial, and it comes off in circular patches, leaving one or more places completely bald: sometimes ten, twelve, or even twenty of these patches are formed, giving the patient a grotesque appearance. I saw a remarkable case of this kind, which was accompanied by a leprous eruption and a sore throat, and preceded by an indurated chancre; the beard and whiskers also come off in circular patches: the cure was perfect in about three months. The loss of hair rarely occurs as an isolated symptom of constitutional syphilis; it has generally been preceded, or is even accompanied by superficial ulceration, or redness of the fauces or pharynx, or those forms of skin disease which are seated in the epidermis or superficial layers of the dermis: it rarely accompanies tubercular or pustular affections. Even when the hair does not fall off, patients suffering from a constitutional venereal taint are subject to a constant formation of scurf on the scalp, which is doubtless due to syphilitic disease: cracks, fissures, and loss of the nails, considered in the next section, are almost always associated with loss of the hair.

I believe, when the hair comes off from causes which are due to syphilis alone, that it is almost always restored under an appropriate treatment. The constitutional treatment required for syphilitic alopecia, is that which is indicated for the other symptoms with which it may be associated. Local treatment is here very important. The best remedy for restoring the hair quickly, and preventing its becoming weak, is no doubt shaving the head, and repeating this operation two or three times, rubbing well into the scalp, at the same time, one of the preparations about to be mentioned. Pomades, containing various preparations of mercury, or lotions or liniments with cantharides, are the chief remedies to be relied on in the restoration of the hair lost from syphilitic causes.

℞ Hydrargyri iodidi, ʒj ;
Adipis prep., ℥iij. M. ft. unguent.

A small portion to be well rubbed into the hair every night, and washed out in the morning, dressing the hair, after washing, with the following preparation :

℞ Ol. morrhuæ,
Tinct. cantharidis, āā ℥j. M.

Or, an ointment composed of one part of the unguent. hyd. nit. oxyd. and three of scented pomatum (E. Wilson); or, the following lotion to wash the head with night and morning :

℞ Ol. morrhuæ, ℥j ;
Liq. ammoniæ, ℥ss ;
Tinct. cantharidis, ℥ss ;
Aquæ mellis, ℥ij ;
Spiritus rosmarini, ℥iv. M.

The mercurial soaps recommended by Sir W. Marsh, and Dr Moore, of Dublin, will be found very serviceable to wash the head with in cases of syphilitic alopecia ; they are made by beating up a drachm of the white precipitate or red precipitate of mercury with an ounce of Windsor soap, adding a few drops of spirit and a little scent.

Dr Burgess speaks highly of the vapours of iodine, or sulphur, as superior to all other remedies in cases of alopecia not syphilitic.[1] I have elsewhere shown that the vapour of the bisulphuret or iodide of mercury arrests syphilitic alopecia, after one or two applications.[2]

---

[1] 'On Eruptions of the Face, Head, and Hands, &c.,' p. 205.

[2] 'On Secondary Syphilis,' p. 26.

CHAPTER XXI.

ONYXIS—SYPHILITIC DISEASES OF THE NAILS.

THE matrix or root of the nail is very commonly affected with syphilitic inflammation, under the influence of which the skin surrounding this part becomes thickened and red, and ultimately ulcerates, the sores thus produced having all the characters of secondary syphilitic ulcers. Sometimes the skin surrounding the nail continues red and everted, and does not ulcerate, but an offensive pus oozes out from between the nail and the skin. In other cases, the nail alone is affected; it cracks or breaks easily, becomes thick and opaque, and loses its transparency in whole or in part; at other times the nail falls off without any appreciable inflammation of the skin, or apparent alteration in the structure of the nail itself.

Syphilitic diseases of the nails occasionally occur as isolated symptoms of constitutional syphilis, and then their nature may be mistaken, unless a strict inquiry be made into the nature of the diseases from which the patient has suffered; when they accompany other symptoms which are decidedly due to syphilis, these are generally superficial redness or ulceration of the throat, alopecia, or diseases of the superficial structures of the skin. The treatment of onyxis is that of constitutional syphilis generally, of which it is always a symptom. Except in the ulcerated forms, local treatment has little or no influence over the disease.

CHAPTER XXII.

OF SYPHILITIC WARTS, EXCRESCENCES, VEGETATIONS, CONDYLOMATA, ETC.

VEGETATIONS, excrescences, or warts of varied form and appearance upon the skin or edges of the mucous membrane, constitute the last variety of syphilitic diseases of the skin. These excrescences appear on the skin or muco-cutaneous surfaces of the male and female organs of generation, both in the primary and secondary forms of syphilis. They are variable in appearance and consistency, sometimes resembling common warts on other parts of the integument, and at others presenting a surface so fibrous or granulated, that they have been compared to the root of the leek or the surface of the raspberry. These fungi, excrescences, warts, or vegetations, by all which names they are indiscriminately known, grow from the surfaces of the skin in the immediate vicinity of the organs of generation, or from the under surface of the prepuce, and from the glans penis, in the male; and in the female from the labia majora, the nymphæ, or the entrance to the vagina itself, which they sometimes entirely surround.

These warts or excrescences arise from several causes. In the first instance, they are commonly produced by the irritation excited by gonorrhœal discharges on the common integument in the vicinity of the organs of generation, and they are commonly produced by the same discharges on what are termed the muco-cutaneous surfaces of these organs (by the muco-cutaneous surfaces, I mean those where the skin and mucous membranes insensibly blend into each other). They may be sometimes found at the orifice of the urethra, or the entrance to the vagina, which is sometimes studded with these growths. I have seen the whole of the vulva, vagina, lower part of the abdomen, the vicinity of the anus, and the upper part of the thigh, covered over with warts, in females suffering from vaginal discharges, either gonorrhœal or syphilitic. In the male they are also found in large quantities on the prepuce in patients who have suffered from balanitis, or gonorrhœa. I have frequently seen these warts (not condylomata or mucous tubercles) in large numbers about the anus in men. Warts are caused, in the first instance, by the irritation produced on the common integument, or the muco-cutaneous surfaces of the organs of generation, by the irritation of pure gonorrhœal discharges. They are caused, secondly, by superficial forms of irritation, excoriation, or ulceration of a venereal character, seated on the surfaces to which I have just alluded. These are common in the male, and are situated on the glans penis itself, more commonly round the corona glandis, or on the under surface of the prepuce, these being properly muco-cutaneous surfaces.

In the third instance, they arise from the surfaces of primary venereal sores themselves, from chancres or ulcers during the period of cicatrisation; and most commonly this takes place when venereal ulcers are treated on the simple or non-mercurial plan. In such cases, more particularly when the patient is suffered to follow his customary avocations during the treatment of the primary syphilitic sore, the latter heals slowly and with difficulty, occasionally remaining stationary for many days together, and showing neither disposition to heal or spread, although its surface may be covered with healthy granulations. In such cases, when the sore does not close, instead of skinning over or cicatrising in the usual manner of an ordinary ulcer, the surface assumes a hardened character, and begins to grow or throw up this hardened substance, which ultimately assumes the aspect of a wart or vegetation. In this way is the third variety of venereal excrescences produced.

All the varieties of warts that I have as yet described belong to the different forms of primary syphilis or gonorrhœa. Vegetations or warts, however, are commonly met with as symptoms of constitutional syphilis, and they are then termed condylomata. The secondary forms of syphilis, on some occasions, strongly resemble the primary forms; and hence it is that, although the varieties of which we have just spoken are produced, like all the other forms of primary syphilis, by the direct application of the venereal poison, they present a striking resemblance to certain excrescences, or fungous growths, commonly denominated condylomata, which result from the contamination of the system. "However, with proper attention, primary condylomata can easily be distinguished from secondary condylomata; for the latter are uniformly accompanied or preceded by other symptoms which point out constitutional disease, and particularly by a very slight scaly or rubeoloid eruption, either with or without a superficial affection of the mucous membrane of the mouth and fauces."[1]

The secondary condylomata are not always accompanied by affections of the skin or throat, but "they appear as a distinct symptom of constitutional syphilis in advanced periods of the disease." It is of the first importance to distinguish between these two varieties—viz. the primary and constitutional, since the treatment suited to the one is not admissible in the other. The first varieties are generally purely local, and may be cured by local means; the second are constitutional, and require a general treatment for their eradication. In forming our judgment as to their true character, we must be guided by the history of the case, the preceding and accompanying symptoms, and the appearances of the disease itself. "They are not so hard as primary warts; they are more of a fleshy nature, more tender, and more apt to bleed. They have a more uniform surface; and instead of being formed of a number of smaller warts connected together, they are composed of one uniform mass. They do not approach so near the verge of the anus as primary watery excrescences generally do, being for the most part of the greatest extent and most elevated near the tuberosity of the ischium. In some cases they become ulcerated, and discharge a great deal of very offensive matter; for the most part the ulceration which takes place being superficial, and not reaching below the surface. Like the other symptoms of constitutional syphilis, these excrescences either continue in the same state, or become gradually worse, as long as no remedy is employed constitutionally for the cure of the disease."[2]

---

[1] Wallace, pp. 388-9.

[2] B. Bell, 'On Gonorrhœa Virulenta and Lues Venerea,' vol. ii., pp.

The surface of these fungi or vegetations frequently secretes a puriform discharge, and this discharge has a power of propagating "a disease similar to that which produced it."

In proof of this assertion, I shall bring forward a case which Sir A. Cooper used to relate in his lectures. "A gentleman in Sussex was called to attend a lady in labour; he felt something in the vagina which appeared unintelligible, and on examination found it to be a crop of warts. He delivered her, but did not say anything about the warts to the lady. In conversation with the husband, he told him that his lady had a number of warts. The gentleman stated, that at the time he was married he had a wart on the penis, and he had no doubt that he had communicated them to his wife." (Cooper's Lectures, p. 497.)

There can be no question about the contagious character of the secretions from secondary condylomata, the mucous pustule of the French writers; independent of daily observation, the experiments of Wallace, Vidal (de Cassis), Waller, and many others, place the matter beyond a doubt.

Warts, or primary excrescences, grow in many instances from the epidermis, their attachment being so slight, that on being removed the cutis vera is left entire. In other cases they proceed from the skin itself; they have not been observed to go deeper than this. The primary forms, being generally purely local diseases, are in most instances to be removed by a treatment purely local; the secondary, resulting from a poisoned or infected constitution, as generally require a constitutional or general treatment for their cure.

The primary forms of warty venereal excrescences are generally to be cured without great difficulty, either by the knife, by ligature, or the application of escharotic or irritating remedies. Where the base is broad, and its attachments to the skin extensive, it is better to trust to the latter remedies, which we shall presently pass in review more particularly. When the knife or ligature is used, it is always advisable to touch the cut surface with some caustic. In the more ordinary

---

125—7. The secondary forms of condylomata are termed by the French writers *mucous tubercles*, mucous papulæ; they differ in nothing from the description I have already given, except in the name.

cases these excrescences may generally be removed by bathing them and the contiguous parts, several times a day, with a strong solution of the muriate of ammonia or the bichloride of mercury.[1] With these applications the warts may be sponged freely several times a day, till as much irritation and inflammation are excited in the surrounding parts as the patient can reasonably bear. In mild and recent cases these remedies will generally accomplish a cure. When the surfaces of the warts are hard, if they are of long standing, or do not yield to the remedies already mentioned, it becomes necessary to employ escharotics and irritants of a more powerful character. When such are used, the parts "should be merely moistened with a pencil dipped in them, nor should this be repeated above once in two or three days." Amongst these stronger preparations are the acid nitrate of mercury, the tincture of cantharides, and the liquor potassæ arsenitis. Arsenic was a favourite remedy with Sir A. Cooper in the destruction of warts. He employed an ointment composed of one drachm of the oxide of arsenic (arsenious acid) to one ounce of spermaceti ointment or lard; the surface of the warts to be smeared with it frequently, according to circumstances. Powders which, when dusted over the warts and integument in their neighbourhood, irritate and inflame the latter, are generally more efficacious than solutions of the same substances. Amongst these may be mentioned equal parts of the savine powder and chloride of mercury, savine leaves powdered and corrosive sublimate, and the hydrargyri nitrico-oxydum.[2] We may also use for this purpose equal parts of the dried or burnt alum, and the nitric oxide of mercury. "After these warts have been removed, by local irritants or by the knife, it will be necessary to use some astringent

[1] ℞ Ammoniæ hydrochlor.,
Aceti destill.,
Aquæ, āā ℥ij. M.
℞ Hydrarg. bichloridi, ℥ss;
Sp. vini, ℥j;
Aquæ, ℥iij. M.

[2] ℞ Pulv. sabinæ,
Hyd. bichloridi,
Hyd. nit. oxydi, āā ʒj. M.

lotion, to restore tone to the capillaries of the diseased surfaces, and to remove any excoriation or catarrh which may have co-existed with the fungous growths." (Wallace, p. 337.) Strong acetic acid or the undiluted liquor plumbi are both excellent applications to many of the primary forms of warts, especially those which form round the orifice of the vagina, as a consequence of protracted gonorrhœal discharges. I have seen large masses of these warts disappear in two or three weeks by the use of the latter remedy, which is exceedingly convenient, as it occasions little or no pain; the skin generally remains for some time of a deep red in the places where these warts have been situated. Mr. Marshall has lately recommended a solution of chromic acid, 100 grains to the ounce.

We may now inquire whether these vegetations, which are the consequence, as we have seen, of some forms of purely syphilitic diseases, require mercury for their cure, or for the prevention of their return, since in many instances they are very liable to do so. Mercury is unquestionably not required for the removal of the first form of venereal warts, which are produced by the irritation of gonorrhœal discharges. Nor do we conceive it can ever be required for the cure and prevention of the second variety, which we have stated to be the result of venereal excoriations. In the treatment of the third variety, it is possible that mercury may be occasionally required. The last form of vegetation, which springs from the surface of the excavated ulcer, rarely occurs where mercury has in the first instance been judiciously used for the cure of the primary ulcer. We must bear in mind, then, that a primary venereal ulcer for which mercury is judiciously employed, is less likely "to heal into a wart" than when such remedy has not been employed.

In ordinary and long-standing cases of vegetations which are the result of venereal sores, mercury will not be required, and we must, in most instances, trust to local remedies only. Hunter and Bell express themselves strongly on this point. "These excrescences (says the former) are considered by many not as simply a consequence of the venereal poison, but as possessed of its specific disposition, and therefore they have recourse to mercury for the cure of them; and it is asserted that such treatment often removes them. Such an effect of mercury I have never seen, although given in such quantities as to cure in the same person recent chancres."

The latter says: "The warts which succeed to chancres commonly remain equally firm and obstinate after mercury has been given as they were before, and are to be removed by the same means as if the constitution had never been diseased. This is a point which in a particular manner merits attention; for whilst the opinion is retained of warts on these parts being in most instances connected with a constitutional syphilis, much mischief is apt to be done by a great deal of mercury being given where no advantage can ever ensue from it. In the treatment of warts, I have known the constitution almost ruined by one course of mercury after another, without any effect upon the excrescences, which were afterwards easily and speedily removed by remedies applied directly to the parts themselves."

In the very recent state, where they spring from the surface of an ulcer which has been treated without mercury, they may in some cases be removed by the administration of this medicine in the usual way in which it is employed for the cure of chancres generally; but this unquestionably should not be done till local remedies have been fully tried and found to fail. In the very recent state, then, of fungi springing from the surface of ulcers treated without mercury, this remedy may and should be employed if local means fail. If, again, these warts have been removed by the knife (a plan not generally to be recommended), and the cut surface run into a foul, intractable sore, mercury may be employed for the treatment of such sore, which is in all probability specific. In all other instances of primary warts mercury must be abstained from, since not the least probable benefit is to be expected from its employ.

The treatment of the secondary forms of venereal excrescences is to be conducted on principles totally different from those which guided us in the management of the primary forms. Here local treatment is comparatively of little use, and constitutional or general treatment is most to be depended on. When, then, we are fully satisfied, from the history of the patient, the appearance of the disease itself, and the preceding or accompanying symptoms, that we are called to treat a case of this nature, if there exist no special contra-indications in the constitution or state of the patient at the time he is presented to us, we should lose no time in submitting him to a mercurial course under the rules which ought generally to guide us in the administration of this drug. The mercurial vapour bath may be employed with great benefit, and the condylomata touched with Plenck's solution.[1]

[1] ℞ Alcoholis,
Acidi acetici, āā ℥ss;
Hyd. bichloridi,
Aluminis,
Camphoræ,
Plumbi carbonatis, āā ʒss.
M. Verrucæ aut condylomata penicillo hoc liquore madido semel vel bis de die tangantur.

CHAPTER XXIII.

CONSTITUTIONAL OR SECONDARY SYPHILITIC ULCERATIONS OF MUCOUS MEMBRANES.

SECONDARY or constitutional syphilitic ulcerations of mucous membranes are extremely common. They may be seated in all parts of the mouth, upon the tonsils, on the posterior part of the pharynx, in all parts of the nasal fossæ, at the orifice of the glottis, even in the larynx itself, in the œsophagus, in the rectum, on the os uteri, and probably in the canal of the cervix.

The mouth is frequently the seat of superficial ulcerations, sometimes placed upon the tongue, the pillars of the fauces, the inner surface of the lips, or other parts. Occasionally these ulcerations resemble ordinary aphthæ; again there is a distinct loss of substance surrounded by an inflamed margin, and at other times it appears as though a pencil dipped in a strong solution of nitrate of silver had been drawn over the tongue. These ulcerations generally, if not always, occur in persons who have taken mercury for the cure of some venereal symptom. They are not under the control of any specific treatment, but generally improve under a regulated diet, general treatment, and frequent gargles, more particularly those in which tannin forms an ingredient.[1] In most instances they are extremely difficult to cure, are very frequently rendered worse by mercury, although sometimes cured by its administration. Aphthous or superficial ulcerations in the mouths of patients who have suffered long under a venereal taint, and have irritable mucous membranes, are frequently due to mercury, and not to syphilis: such patients suffer much also from dyspepsia. It frequently happens that mercurial medicines given internally aggravate these conditions of the mouth, whilst they subside under the use of mild astringents and tonic gargles,[1] the administration of small doses of conium and opium, and the cold infusion of sarsaparilla in lime-water.[2] Where such conditions of the mouth are associated with other symptoms of constitutional syphilis, they may still have a mercurial origin: should the general means we have mentioned fail in benefiting them, mercurial remedies may be tried.

---

[1] ℞ Tannin, ℈j;
Spiritus vini Gallici, ℥ij;
Aquæ rosæ, ℥vj. M. ft. gargarisma.
℞ Tincturæ myrrhæ, ℥j;
Liniment. æruginis, ℥ss. M.
The ulcers to be touched with this liniment night and morning.

The syphilitic ulcers of the throat, pharynx, and fauces appear under several forms.[3]

1st. The deep excavated ulcer of the tonsil, covered with an ash-coloured slough, and surrounded by a deep, livid, red condition of the mucous membrane. This ulcer, though generally seated between the pillars of the fauces, is sometimes seen on the uvula. This is the true venereal sore throat of Hunter, and English surgeons generally; and, unless the remedy be specially contra-indicated, requires a mercurial course for its cure. It may occur with other symptoms of constitutional syphilis, and very frequently is found to be associated with persistent induration of the cicatrix of a recently-healed chancre.[1]

---

[1] ℞ Acid. hydrochloric., ♏xl—ʒj;
Tinct. cinchonæ, ℥j;
Aquæ fontanæ, ℥vij. M. ft. garg.

[2] ℞ Rad. sarsæ, ℥iv;
Rad. glycirrhizæ, ℥j;
Liq. calcis, Oij. M.

Macera per horas xxiv, deinde cola. Dosis, cochlear. iv larg. bis die.

[3] Examination of the Fauces and Throat.—Secondary syphilitic ulcers may be situated on the uvula, the soft palate, on the pillars of the fauces, on the tonsils, or on various parts of the pharynx; they are easily discovered in many of these situations, but without care they may somtimes escape observation. The mere depression of the tongue by a spatula is not sufficient, in all cases, for the proper examination of the throat, especially in some persons. The anatomical disposition of the parts I have mentioned is so variable, that it renders the examination of some throats a matter of great ease, whilst in others it becomes an operation of some difficulty. An ulcer frequently lies concealed between the anterior pillar of the fauces and the surface of the tonsil; I have known ulcers in this situation escape observation for a long time, although frequent examinations of the throat had been made in the ordinary manner. To ascertain certainly whether the throat is quite free from disease, each fold of membrane should be carefully unfolded and examined. In some rare cases, ulcers exist behind the velum, either on the posterior surface of this membrane, or high up on the pharynx. These are frequently connected with affections of the nasal fossæ and the posterior nares; and unless these parts be all carefully examined, in suspicious cases, we may be led into serious mistakes and errors.

2nd. Creeping superficial ulcers, found on the uvula, fauces, and pharynx.

3rd. Sloughing ulcers extending rapidly down the fauces, covered with white tenacious sloughs. These may extend over the whole of the pharynx; they resemble precisely phagedena in other parts.

The whole back of the pharynx is frequently the seat of extensive phagedenic ulceration: I have seen the whole of this portion converted into a pultaceous mass resembling hospital gangrene. This form of disease accompanies or succeeds to rupia or ecthyma in bad habits of body; but I have also seen extensive ulcerations here where the general health was not much affected, and the disease has occurred as an isolated symptom. These ulcerations run down the back of the pharynx, to a greater or less distance, into the œsophagus itself.

Secondary phagedena of the fauces and pharynx is always formidable, dangerous, and may become a fatal disease, from the extension of the ulceration down the œsophagus, and the production of stricture of that tube, arising either from spasmodic or organic contraction, the first due to the irritation produced by an ulcer in the œsophagus, or low down in the pharynx; the second, to the permanent contraction consequent upon its healing.

---

[1] This ulcer, which has been termed "amygdaline chancre," has been inoculated with success. The details of the case may be found in the 'Annales des Maladies de la Peau, et de la Syphilis;' it is also quoted by Vidal de Cassis, p. 404.

CASE XXXIII.

Permanent stricture of the œsophagus, produced by the cicatrix of a secondary phagedenic ulcer.

A girl, æt. 21, was admitted into the Queen's Hospital, under the care of Mr West, in May, 1858, with secondary phagedena of the pharynx; she had previously suffered from various forms of secondary syphilis. On examining the throat, the cicatrix of a large ulcer which had been seated on the posterior wall of the pharynx was brought into view; and by depressing the tongue, the upper part of an ulcer which appeared to extend downwards into the œsophagus was distinctly seen. She could only swallow fluids, and that with considerable difficulty. At this period, Mr West, going from home, requested me to take charge of the patient during his absence. She had at times complete dysphagia. For many hours together, at one time as many as thirty-six, she could not swallow anything. Neither an ordinary œsophagus bougie, nor a male catheter, nor ordinary urethral bougie, could be passed. She could not swallow milk or beef-tea, but she could generally swallow cider. Shortly after this she died, completely exhausted.

On examination, "the upper part of the œsophagus, for about four inches, was found much dilated; its mucous membrane thickened, and marked by spots having the appearance of recent cicatrices. At this distance from the upper end it was suddenly contracted, and terminated in a narrow canal which would barely admit a No. 4 catheter. The contracted portion, which was about two inches and a half in length, was formed by the thickening of the mucous membrane, and by fibrous bands and bridles, having very much the appearance of an old stricture of the urethra. Below this track the œsophagus continued perfectly healthy into the stomach."[1]

CASE XXXIV.

A gentleman, who had suffered many years from secondary syphilis, consulted me respecting his throat: he had a chronic secondary ulceration of the pharynx. He was hoarse, tormented with cough, and hawking up of frothy mucus mixed with blood. He had pain in swallowing, shooting through into the ear, and seeming to originate from some mischief deep in the throat below the root of the tongue. On examination, the whole of the back of the throat was found intensely red; it looked like an old red cicatrix, with here and there white, hard spots disseminated through it; in places superficial ulcers existed; the whole mucous surface appeared destroyed. He had great difficulty in swallowing. He was much emaciated, and looked like a man labouring under organic disease of the lung: both lungs and windpipe were apparently healthy. Soon after consulting me, this patient started on a voyage to the Cape for the benefit of his health, but died exhausted on the passage.

---

[1] For a fuller detail of this case, see Mr West's paper 'On Syphilitic Stricture of the Œsophagus,' in the 'Dublin Journal' for February, 1860.

A few similar cases are to be found on record. Two are recorded by Yvaren, in his 'Métamorphoses de la Syphilis,' where difficulty of swallowing, apparently caused by ulcers in the pharynx, was cured by a mercurial treatment (pp. 388, 389). Virchow gives a case where the superior portion of the œsophagus was contracted by a syphilitic cicatrix (op. cit., p. 88). Follin attributes stricture of the œsophagus in many cases to the healing of syphilitic ulcers.[1]

4th. Deep, livid redness of the arch of the palate, fauces, and throat, occurring with various forms of the syphilida, or soon after the healing of a primary sore. These symptoms may occur with or without different forms of cutaneous eruption, pains in the head and limbs, loss of hair, and other forms of constitutional infection: also with the most varied conditions of the general health. One kind of ulcer of the soft palate is generally situated immediately under the posterior nares: by passing the finger into the mouth, it will be perceived at once where the hard palate terminates and where the velum commences; the length of the latter, which is variable, will also be at once ascertained. It is this part of the throat which is most commonly perforated by secondary venereal ulcers, which are commonly due to disease concealed in the passages of the nose:

---

[1] 'Rétrécissements de l'Œsophage,' Paris, 1853.

there is redness in this place some days before perforation takes place, and this, being unaccompanied by that dryness which accompanies ordinary syphilitic inflammation of the fauces, is not under ordinary circumstances noticed by the patient.

Patients who have suffered from constitutional syphilis frequently complain of pains in the throat, increased by deglutition, and referred to various points about the larynx and pharynx. The parts which are the seats of these pains have previously been affected by ulcers or inflammation; but although the ulcers had healed, the pains remained. I have frequently been unable to detect any lesion in parts thus affected, and have been led to regard many of these cases as pure syphilitic "neuroses."

The treatment of venereal ulcers of the throat resolves itself into local and constitutional. To the first variety local treatment is hardly beneficial, and against it, unless specially contra-indicated; as I have already said, a mercurial course should be directed, the best mode being by inunction, employing at the same time the mercurial vapour bath.

Local treatment, of all the other forms, is very important. The ulcers should from time to time be touched with one of the caustics already recommended in the treatment of the primary ulcer; such as the nitrate of silver, the liquor hydrargyri pernitratis, the muriatic or nitric acids.[1] In the intervals of these applications, gargles of various kinds are very useful: I have found the oxymel æruginis one of the best of these. Gargles containing kreasote are also very useful. With this local treatment should be associated whatever constitutional treatment the nature of the case may point out; and here so various are the conditions, that it is impossible to lay down any fixed rules. Should mercury be used, and how? This will depend upon the nature of the accompanying symptoms, the condition of the general health, and the previous treatment. Should there be a scaly eruption, an indurated cicatrix, and tolerably good health, mercury may be fully employed with a reasonable hope of success, according to the general principles inculcated in this work.[1]

---

[1] Liquid caustics, such as the nitric acid, or acid nitrate of mercury, should be employed with great caution in extensive ulcerations of the fauces, soft palate, or pharynx. When used, the material should never be so wet as to risk a drop of fluid falling into the œsophagus or pharynx; the fumes should also be suffered to pass off before the remedy is applied.

I would mention as other remedies likely to be of service, the cold infusion of sarsaparilla in lime-water, full doses of opium, the mineral acids, or the hydriodate of potass.

---

[1] Secondary ulcers in the throat and fauces are symptoms not to be treated lightly. If they are spreading, a bold attempt should be made to arrest their progress. I have done this at once by immersion in a strong mercurial vapour bath for half an hour. I do not mind how weak the patient is, if he can sit up; the remedy is perfectly safe. I have also succeeded in many bad cases by frequent frictions of mercurial ointment in the axilla, supporting the patient's strength with wine, beef-tea, and brandy-and-milk, and administering internally bark with mineral acids. Sometimes twenty-four hours of this treatment will arrest an ulceration that has been slowly spreading for days, or even weeks.

CHAPTER XXIV.

OF SYPHILITIC DISEASES OF THE NOSTRILS AND NASAL FOSSÆ.

PRIMARY venereal sores may unquestionably be produced in the nostrils by the direct application of the virus; these instances are, however, rare, and must be the result of accidental inoculation by means of the instruments, sponges, or linen used to cleanse sores on other parts. Secondary ulcerations are frequent. They are seated sometimes on the septum nasi, and frequently perforate the cartilage; but most commonly these secondary ulcerations affect the mucous membrane of the superior or ethmoidal spongy bones. Constitutional or secondary syphilitic affections of the nostrils are by no means uncommon. They generally appear under one of the following forms:—In the first they are characterised by chronic inflammation of the pituitary membrane, with an alteration in the character of its secretions, the latter being offensive, profuse, and commonly tinged with blood. In the second form, we find ulcerations of varied character and appearance; and, again, discharges of vast quantities of hard, discoloured, and offensive crusts, seemingly of dried mucus, without any alteration in the appearance of the mucous membrane of the nostrils, at least so far as this can be seen, though these discharges may probably depend on chronic inflammation of the membrane lining the upper meati of the nose. In the latter form there is also a marked alteration in the character of the voice. Caries or necrosis may also attack the cartilages or bones of the septum, or, what is more common, the turbinated bones themselves: in such cases the smell is intolerable.

These diseases often commence with the symptoms of ordinary cold: the nose is dry and uncomfortable, and the voice slightly hoarse. The symptoms, however, do not yield to ordinary treatment; and to this dryness ultimately succeed discharges of fetid muco-pus, and blood, and hard crusts of inspissated mucus, sometimes mixed with small portions of bone. An ordinary syphilitic ostitis, or periostitis, affects the ossa nasi, by which they are frequently thickened to a considerable extent. I have seen one or two cases of this character. The secondary syphilitic diseases which affect the nose are, however, most frequent in its interior, and affect the lateral or central cartilages, the spongy bones, or the membrane covering these parts.

These diseases of the nassal fossæ very commonly occur as isolated symptoms of secondary syphilis, and under such circumstances, without a correct history of the case, their nature might be mistaken; they are sometimes the only remnants of a syphilitic taint, the health being otherwise good. I have known one or two cases where persons in such states have married, and had healthy children. These diseases are sometimes congenital and hereditary. I saw a young lady, aged 16, who had had an affection of the nose of this nature since she was three weeks old. It commenced with that snuffling so characteristic of infantile syphilis, and which I believe to be due to syphilitic inflammation of the mucous membrane of the turbinated bones: if not cured, this ends in exfoliation of these bones, and probable sinking of the ossa nasi. This happened in the case just alluded to. The father had been diseased in this case, the mother never.

The treatment is constitutional and local. The former is that of secondary syphilis generally. The local treatment consists of the vapour of the iodide or bisulphuret of mercury, or calomel, directed by a very simple process into the nassal fossæ, for a few minutes daily; injections of calomel and lime-water, or solutions of kreasote, the nitrate of silver, or the chloride of zinc.

The naso-lacrymal canal is frequently obliterated by secondary syphilitic diseases of the nasal fossæ.

CHAPTER XXV.

ON SYPHILITIC DISEASES OF THE LACRYMAL PASSAGES.

SYPHILITIC diseases of the lacrymal passages are commonly associated with or produced by affections of a similar character, existing in the interior of the nose. I have in several cases scattered through this work alluded to such diseases, but here I wish to speak of them more specifically.

When, during the presence of a syphilitic taint in the system, the lacrymal passages become obstructed, and the tears run over the face, there is reason to suppose that such obstruction is due to syphilis, and that it is produced by one of two causes: 1. Syphilitic inflammation of some part of the mucous membrane of the lacrymal passages, or nasal duct. Nothing can be more likely, where the mucous membrane of the nose is affected, than that the disease should extend through the nasal duct, and terminate in its obstruction, the formation of an abscess, and subsequently a lacrymal fistula. Or, 2. Disease may be produced by affection of the bones entering into the composition of the nasal duct, such as the os unguis, the nasal process of the superior maxillary bone, or even the internal angular process of the frontal. A true venereal ostitis may exist in these bones, by which they are swollen and enlarged, and the lacrymal or nasal passages consequently obstructed, or even obliterated. I have elsewhere spoken of syphilitic ostitis or periostitis of the nasal bones. Should these diseases coexist with a well-marked syphilitic taint, and succeed to or be complicated with syphilitic disease of the nostrils or nasal fossæ, there can be little doubt of their nature: they may occur, however, as isolated symptoms of syphilis after all others have for some time disappeared, and, like syphilitic sarcocele and many other diseases which are clearly due to syphilis, may cause a doubt as to their nature, especially where the patient denies all syphilitic antecedent.[1]

---

[1] See an excellent paper by Lagneau fils, 'Archives Générales de Médecine,' March, 1857: it contains ten original and selected cases.

CASE XXXIV.

Obliteration of the nasal duct by syphilitic periostitis of the nasal process of the superior maxillary bone.

A. B., a girl æt. 22, was admitted into the Queen's Hospital under my care in July, 1857, with a lichenoid eruption, ulcers on the labia, and a sore throat. The tears from the left eye flowed over the cheek. On examination, the left nasal duct was found completely obstructed. A large, distinct nodular swelling, tender to the touch, was situated in the course of the duct, extending half-way down the nose, closely resembling a node, of the nature of which it doubtless partook, being due to syphilitic ostitis of bones entering into the compositiou of the nasal duct. The disease, in this instance, was chiefly seated in the nasal process of the superior maxillary bone.

Some curious cases bearing upon this subject have been collected by Yvaren, p. 234—"Fistula lacrymalis a lue venerea."

Benjamin Bell, in a remarkable passage, speaks also of another mode in which the flow of the tears through the natural course may be interupted from causes of a syphilitic nature.[1]

---

[1] "In some cases the venereal virus fixes upon the eyelids, and chiefly upon their cartilaginous borders. This sometimes happens by itself, but for the most part it is connected with syphilitic eruptions in other parts of the body. The parts become red and somewhat tender, and an effusion takes place among the eyelashes, either in the form of a dry scurf, or of a gummy, viscid matter. In this last case the effusion proves always extremely troublesome, particularly after sleep, as it glues the eyelids so firmly together as to render it difficult, and even painful, to open them. In this affection of the eyelids, I have in different instances observed a symptom which has not, so far as I know, been taken notice of by authors. The tears at first fall in drops near the internal angle of the eye, and this terminates in a constant trickling over the cheeks. Those who are not accustomed to examine the eyes in this state are apt to consider this flow of tears as the commencement of fistula lachrymalis, whereas it proceeds from a cause which tends effectually to prevent the formation of this disease. On minute inspection, it appears evidently to arise from the puncta lachrymalia being obstructed by the viscid matter forming upon the cartilages of the eyelids, by which the tears which should pass by these openings into the lachrymal sac, and from thence into the nose, are necessarily forced over the cheeks. In some cases this weeping state of the eyes proves to be temporary, and disappears with the cause by which it was produced; but in others it continues permanent, owing, I suppose, to the puncta being obliterated by the long continuance of the disease."—B. Bell on Lues Venerea, vol. ii., p. 142.

CHAPTER XXVI.

ON SYPHILITIC DISEASES OF THE EAR.

ALTHOUGH syphilis doubtless plays an important part in the etiology of deafness, many modern writers on "Diseases of the Ear" are comparatively silent on the subject. Mr Wilde, however, remarks that "Syphilis has played a more extensive part in the production of deafness than the Profession is aware of." Nothing is definitely known of the effects of syphilis in the middle ear, although it is not improbable that some of the changes observed in the diseases of this part may be due to syphilis. Syphilitic diseases of the external and internal ear are, however, not uncommon, and can be definitely traced and diagnosed. The most evident cause of syphilitic disease of the ear would appear to be ulceration of the throat and fauces. I have given numerous cases, in the course of this work, of destruction of the whole of the soft palate and faucial mucous membrane by syphilitic ulceration; and in these ravages it is utterly impossible that the faucial extremity of the Eustachian tube could escape being implicated in the mischief: yet I do not recollect ever having seen a case where the hearing was totally destroyed from such a cause; although I have seen it more or less impaired. In these cases the faucial orifices of the tubes may be more or less occluded by pus, mucus, sloughs, or the cicatrices of ulcers.

M. Vidal says that he has seen the meatus auditorius filled with mucous tubercles, producing a profuse otorrhœa. Mr Wilde ('Aural Surgery,' p. 261) describes an inflammation of a specific character (syphilitic) as occurring in the membrane of the tympanum. He says, "The disease appeared suddenly as an eruption was fading off, and was accompanied by loss of hair: generally speaking, eruptions, copper-coloured blotches, fissures and ulcers of the tongue, and slight nocturnal pains, preceded the aural affection. The symptoms consisted in a sensation of fulness in the head, and often vertigo in stooping or rising up suddenly; the patients have usually a feeling of fulness in the ear, but in no instance accompanied by acute pain: in this consists one of the chief characteristics of the disease, that whilst it is unaccompanied by local pain, as in ordinary sub-acute inflammation, the membrana tympani will be found to present a degree of redness equal to, and sometimes exceeding, that seen in acute myringitis. The redness has generally a brownish hue in the syphilitic form; there is not at first much loss of polish, but in a short time the membrane assumes a fuzzy appearance: both ears are usually affected at the same time. The amount of deafness is always very great, and is the symptom that first attracts the patient's attention, and it seldom varies. Tinnitus is not usually present; but in two cases the deafness was ushered in by a very loud noise, which passed away in a few days. The inflammation does not end in muco-purulent discharge from the tympanum, the surface of the membrana tympani, or the sides of the auditory canal. Nor is lymph effused in the membrane; but from its brownish-red colour in the very early stage, from a yellowish speckled opacity which is generally observable in it in the subsidence of the redness, and from the intense degree of thickening and dulness present in some cases, evidently the result of syphilitic disease, it was evident that lymph was largely effused between the lamina, or on the inner surface of the membrana tympani." (P. 262). Mr Wilde states that two of the worst cases of non-congenital deafness he ever saw were the result of syphilitic inflammation; and in both there was great thickening, opacity, and insensibility of the membrane.

The treatment of these cases consists in the application of leeches behind the ear, and the administration of calomel, blue pill, and opium, and afterwards of the iodide of potassium.

CHAPTER XXVII.

ON SECONDARY SYPHILITIC AFFECTIONS OF THE TONGUE.

PRIMARY syphilis is not uncommon in the tongue. I have seen two cases of well-marked indurated chancres on this organ. Out of 824 chancres the seat of which was noted by M. Fournier, three were seated on the tongue. By some law not yet explained, chancres of the tongue are of the indurated kind, and are accompanied by enlargement of the submaxillary glands. Other diseases of the tongue, as cancer, &c., produce, however, the same effect on these glands.

The diseases which affect the tongue, during the presence of a venereal taint in the system, are due to three causes:

1. The use of the iodide of potassium;
2. The exhibition of mercury; and
3. To syphilis itself.

In certain cases, iodine produces a disease in the tongue somewhat resembling syphilis. I have elsewhere recorded some cases of this nature.[1] A surgeon consulted me for a skin disease of suspicious character, for which he had attempted to take the iodide of potass; "but," said he, "whenever I use this medicine for two or three days, solid lumps, like tubercles, make their appearance on the skin and on the tongue; and the latter organ becomes so large and painful, that I am obliged to give the remedy up." Such is an acute condition produced by iodine, which subsides when the drug is discontinued; but in the more chronic forms, where the mischief has been slowly produced, the disease in the tongue remains even when the medicine is used no longer.

Mercurial and venereal diseases of the tongue are frequently confounded with each other, and great discrimination and experience, with the most acurate history of the case, and of the effects of remedies, are necessary to enable us to determine the exact nature of these affections. A gentleman who had suffered from various forms of constitutional syphilis for five years, was sent to me for my opinion as to the nature of a disease in his tongue, which had been in existence for two years, and had resisted the ordinary means of cure. The organ was large, and could not be retained within the teeth. The saliva was continually running over the chin ; it was exceedingly tender to the touch, crums of bread and the mastication of solid food occasioning severe pain. The centre of the tongue was hard and nodulated; and there existed also in the centre, a deep, foul ulcer, extending through a great part of the substance of the tongue. On either side of the tongue were small fungoid growths, resembling small ripe strawberries. In other respects, the health was good ; and there was no symptom of secondary syphilis present, except some coppery macular stains on the shoulder and abdomen. This patient had taken large quantities of the iodide of potassium for three years, so much, said he, that my perspiration stained my linen brown ; he had also used mercury by the mouth : the latter remedy so taken always increased the mischief in the tongue. In this case, it required some care to determine whether the disease were due to mercury, syphilis, or iodine ; and in such cases it is exceedingly difficult to form a correct opinion, particularly where mercury internally disagrees with the patient.

---

[1] 'Provincial Medical and Surgical Journal,' No. 3, 1852.

The disease was syphilitic, and was ultimately completely cured by the moist mercurial fume, used daily till the gums were sore.

Aphthous spots and superficial ulcerations on the tongues of patients who have taken mercury internally, and who are still suffering from venereal taint, are due in many instances to mercury, and not to syphilis. It almost invariably happens, that mercurial medicines in any form, given internally, aggravate these conditions of the tongue, while they subside under the use of mild astringent gargles, and the administration of small doses of the extracts of conium or opium. When they coincide with a well-marked venereal disease, they may still be due to mercury, and mercury given in any form internally is in such states contra-indicated. A patient under my care for syphilitic lepra, for which he was using the mercurial vapour, and taking three grains of blue pill every night, began to complain of his tongue, although the gums were hardly affected. The organ became large, tender, and covered with aphthous patches. A large induration appeared on the back of the tongue, which ulcerated, and ended in a deep, foul ulcer, with surrounding induration. These symptoms increased, while the scaly disease of the skin disappeared. This happened twice before when the patient had taken mercury.

The mercurial tongue may be confounded with the syphilitic one, if the history of particular symptoms and the effects of remedies upon them be not carefully noted and watched. Thus we see that the remedy which cured the lepra produced the disease in the tongue. Mercury in some cases fixes on the tongue, while it but slightly affects the gums. Acute mercurial glossitis is hardly to be mistaken, as it directly succeeds to the use of the remedy, and subsides, though slowly, when this is discontinued: in such cases the tongue is large and patchy; red in some places, white in others, very much resembling the appearance of the glans penis in acute balanitis. The chronic forms of mercurial disease in the tongue are much more difficult to distinguish.

Where chronic mercurial glossitis occurs in patients who have long laboured under venereal taint, it becomes a matter of some difficulty to determine whether the mischief in the tongue is due to mercury or syphilis; and sometimes the effects of treatment only will set us right on this point. I have been consulted in several cases by patients who have laboured under such conditions of tongue for more than twenty years:—" A surgeon, aged 47, consulted me for an old venereal complaint of twenty-four years' standing, of which the more prominent features at the time of his visit were patches of psoriasis on the hands and other parts, sarcocele of the right testis, and tubercles, with fissures in the tongue. He had been salivated several times, and taken large doses of the iodide for long periods; but the ultimate effects of treatment showed that the condition of the tongue was venereal."

The symptoms which are most characteristic of the true venereal tongue are vegetations, deep fissures or cracks, ulcers, and tubercles. The vegetations of a syphilitic nature which occur on the tongue occupy its sides or its surface, are vividly red, and resemble a very small ripe strawberry. I believe these never occur but from syphilis; they are met with alone, or in conjunction with fissures, tubercles, or ulcers; they come on early after the disappearance of other symptoms of syphilis, or are associated with them, whether mercury or iodine has been employed or not.

The deep fissure or crack in the tongue is also commonly due to syphilis; the tongue sometimes appears as though it had been cut with a knife. The venereal ulcer of the tongue is most frequently long and sinuous; we are obliged to unfold the organ, as it were, to see the bottom of it; and its sides, unlike the common fissure, are more or less indurated. The venereal tubercle appearing in the tongue is a hard, solid body, occurring alone, or with some of the other symptoms I have mentioned; it generally comes on late in the history of a venereal taint, and sometimes long after the disappearance of every other venereal symptom; it resembles very much the state of tongue produced by the iodide of potassium, and may certainly be confounded with incipient scirrhus of the tongue.

I mention here one or two cases which exhibit the course, complications, and treatment of syphilitic diseases of the tongue.

CASE XXXV.

Secondary syphilis of the tongue, resembling cancer.

A. R—— was admitted into the Queen's Hospital, under my care, in June, 1856. He said he was sent to have a lump on his tongue cut out. He had on the under surface of the tongue a large lump, as large as a split hazel nut, which was ulcerated at the top. He denied ever having had syphilis, but admitted the pre-existence of an eruption, which, he said, existed no longer. I stripped and examined him. On the body were groups of copper-coloured mottlings, into which scaly or papular eruptions frequently fade; and in one or two places there were well-marked scaly spots. The lump on the tongue looked and felt very like cancer; but, acting on the hint given of the state by the skin, I placed the patient on a mercurial course, which completely cured the tongue in three weeks.

I have, in the chapter on the 'Diagnosis of Secondary Syphilis,' recorded the case of a man, upwards of seventy, who had a secondary syphilitic disease of the tongue still more resembling cancer, but completely cured by a mercurial course.

CASE XXXVI.

Secondary syphilitic ulcer of the tongue, appearing during a mercurial course, cured by a change to another form of mercurial preparation.

M. C——, a lady unfortunately diseased by her husband, was under my care for a formidable attack of syphilitic lepra. She was treated by mercurial vapour, and took no mercury internally. Soon after the skin disease had disappeared, the tongue became stiff, and two or three white patches made their appearance on the sides of the tongue, and which soon ran into deep ulcers. There was no swelling of the gums. The symptoms were soreness, pain, swelling, and ulceration of the tongue. I believed this to be a case of simple secondary syphilitic ulceration of the tongue. The mercurial vapour was now omitted, and the patient placed upon the use of calomel and opium till the gums became tender. The tongue got rapidly well under this treatment.

I treated another case of lepra by mercurial vapour, where the tongue was ulcerated; the vapour appeared to have no influence on the tongue, although it cured the lepra. This patient was cured of his tongue disease by frictions of calomel on the gums, on Clare's plan.

These facts illustrate what I have so frequently had occasion to remark with regard to the influence of mercury on the different symptoms of syphilis. One preparation of mercury will have no effect on a particular symptom of syphilis, when by using another it shall rapidly disappear. The mode of exhibiting the remedy also produces very frequently the same effect: very frequently the internal administration will fail, where the vapour will cure, especially in skin diseases; and frictions will succeed where both the others have failed, especially in throat diseases. Nothing but experience can guide us. What is still more remarkable, as the case just detailed shows, a particular form of remedy will cure one symptom, whilst it leaves another untouched, or under the use of which it actually gets worse, whilst with a change of remedy the latter shall soon amend and be cured.

Some discrimination is necessary to enable us to determine the nature of the disease correctly, and consequently to frame an appropriate plan of treatment. To enable us to do this, attention to the following points is important:

1. The condition of the general health.
2. The nature of any concomitant disease, whether venereal or not; and whether the patient has at any and at what time suffered from constitutional syphilis; under what forms, and how it has been treated.
3. Whether mercury or iodine has been taken for the disease in the tongue, and with what effect upon it.
4. The condition of the submaxillary lymphatic glands.
5. Whether the patient has worked at any occupation in which the fumes of mercury are employed.

A careful inquiry, based on these suggestions, will most frequently enable us to ascertain the actual nature of the disease, and thus to treat it properly.

CHAPTER XXVIII.

OF SYPHILITIC DISEASES OF THE LARYNX.

THE larynx is very commonly affected by constitutional syphilis; but these diseases are most commonly preceded by other symptoms, which are or have been seated in the nose and the throat, or the pharynx. The diseases of the larynx clearly produced by syphilis are, chronic or sub-acute ulceration of its mucous membrane, or that of the trachea; ulceration, caries, and nodes of the cartilages; and contraction of the larynx or trachea, caused by the cicatrisation of ulcers. One of the most formidable varieties of constitutional syphilis is ulceration of the mucous membrane of the glottis and larynx. Of this form of disease I have seen many examples; and modern writers on venereal diseases, more particularly Mr Carmichael, M. Cazenave, and Virchow, have reported others. Syphilitic ulceration of the larynx generally follows or accompanies other similar diseases of the nasal fossæ, throat or pharynx, or various forms of the syphilida; it does not commonly occur as a solitary symptom of constitutional syphilis, and consequently we are the less likely to be deceived as to its true character.

The symptoms are, at first, an alteration in the character of the voice; it becomes hoarse, husky, or totally lost; the patient expectorates a fetid pus, and portions of slough mixed with blood; the thyroid cartilage is somewhat enlarged, and there is considerable tenderness when the larynx is examined with the fingers. In this condition the patient is generally much emaciated, and night perspirations are present. These symptoms closely resemble those of laryngeal phthisis, and even ordinary phthisis pulmonalis; from the former disease syphilitic ulceration of the larynx is to be distinguished by the precedence of primary or other constitutional symptoms of syphilis, or by the co-existence of the latter. The stethoscope will hardly suffer us to mistake this disease for ordinary pulmonary consumption; indeed, the almost invariable existence of other forms of constitutional syphilis with ulceration of the larynx will, in most instances, clear up any doubt as to the true nature of the latter.

CASE XXXVII.

J. M'K—— was admitted under my care as an in-patient of the Queen's Hospital, in May, 1852. He had been suffering for two years from a chronic pustulo-crustaceous disease of the skin, and a large ulcer in a sloughy condition occupied the whole of the pharynx. He was much emaciated, had constant cough, expectorated an offensive bloody muco-pus, and could not speak above a whisper. Auscultation detected no disease of the lungs. The constitutional symptoms of syphilis had been preceded by chancres of the glans penis and urethra, the latter of which were not healed. He underwent a variety of treatment with little benefit, and ultimately died of extreme exhaustion. The inner surface of the larynx was destroyed for a great extent by an ulcer, precisely resembling that which occupied the pharynx, and a series of creeping ulcers extended down the urethra nearly to the neck of the bladder.

M. Cazenave has recorded some cases of syphilitic ulceration of the larynx cured by the iodide of mercury; in all the cases that I have seen, I have found the disease difficult to manage, and very frequently fatal. Mr Carmichael has experienced the same difficulty, and has proposed to lessen it by performing tracheotomy. "If the ulcer is in the larynx, there can be little hope of inducing it to heal, on account of the constant current of air through this passage, and the frequent motion to which it is subjected, as the chief organ of voice.[1] I have, however, in

---

[1] Sometimes syphilitic ulcerations occur low down in the trachea, destroying the cartilages, and contracting the tube by cicatrices, exactly in the same manner that the œsophagus is strictured by the healing of ulcers in that tube or in the pharynx. These cicatrices are extremely thick, hard, and callous; they contract or pucker up the tissues, and thus produce a true stricture of the larynx, and the patient dies of suffocation. Cases

CHAPTER XXVIII.

OF SYPHILITIC DISEASES OF THE LARYNX.

THE larynx is very commonly affected by constitutional syphilis; but these diseases are most commonly preceded by other symptoms, which are or have been seated in the nose and the throat, or the pharynx. The diseases of the larynx clearly produced by syphilis are, chronic or sub-acute ulceration of its mucous membrane, or that of the trachea; ulceration, caries, and nodes of the cartilages; and contraction of the larynx or trachea, caused by the cicatrisation of ulcers. One of the most formidable varieties of constitutional syphilis is ulceration of the mucous membrane of the glottis and larynx. Of this form of disease I have seen many examples; and modern writers on venereal diseases, more particularly Mr Carmichael, M. Cazenave, and Virchow, have reported others. Syphilitic ulceration of the larynx generally follows or accompanies other similar diseases of the nasal fossæ, throat or pharynx, or various forms of the syphilida; it does not commonly occur as a solitary symptom of constitutional syphilis, and consequently we are the less likely to be deceived as to its true character.

The symptoms are, at first, an alteration in the character of the voice; it becomes hoarse, husky, or totally lost; the patient expectorates a fetid pus, and portions of slough mixed with blood; the thyroid cartilage is somewhat enlarged, and there is considerable tenderness when the larynx is examined with the fingers. In this condition the patient is generally much emaciated, and night perspirations are present. These symptoms closely resemble those of laryngeal phthisis, and even ordinary phthisis pulmonalis; from the former disease syphilitic ulceration of the larynx is to be distinguished by the precedence of primary or other constitutional symptoms of syphilis, or by the co-existence the throat. The whole back of the pharynx was converted into an ulcer, having very much the character of hospital gangrene; and the whole of the soft part of the palate was gone, destroyed by previous ulceration. The voice was very hoarse; sometimes he was unable to speak. The bottom of the ulcer could not be seen. The windpipe was very much enlarged, and exceedingly tender. He was at this time directed to use a small quantity of the vapour of the grey oxide of mercury every morning to the throat, and in the intervals to wash it out with a kreasote gargle, consisting of ten minims of kreasote to half a pint of water, with an ounce of honey—an application, in many forms of secondary phagedena, I have found exceedingly useful. He took, in the shape of medicine, iodide of potassium with bark, and an opiate at night. The diet consisted of cocoa, milk, beef-tea, and wine-and-water. During the time he was under treatment, he had an attack of hæmorrhage from the throat. This was arrested by pressure on the carotid artery. After a month's treatment, he got better; the ulceration of the throat healed; and he was able to return to his native place. He wrote some weeks afterwards to me, stating that he was worse, and begging that I would take him into the hospital. I did so. He at that time could not speak, and was even more emaciated than before. I have said that he could not speak; and he was irritated by my mistaking his meaning, thinking he said no when he meant yes. I mention this to show the state he was in. Very little was done for him: in fact, very little could be done. I recommended him to smear the surface of the larynx with mercurial ointments, and put on a linseed poultice. He also inhaled the vapour of the tincture of conium; but he was only in the hospital two days, when he died. He was found dead. The house-surgeon saw him at eight o'clock in the evening; and, about two in the morning, he was discovered dead by the night-nurse.

On opening the windpipe, the disease was seen evidently external to it; it was not in the mucous membrane of the larynx, but in the cricoid cartilage. The larynx, having been opened at the back, showed a small abscess surrounding the cricoid cartilage, which was denuded and partly destroyed by ulceration.

This was an example of venereal disease of the cartilages of the larynx, and resembles the history of syphilis as it often progresses in bones. In them, we find that the periosteum is surrounded by matter placed between it and the bone; and if the nodes are opened, which they ought never to be, you will find analogous appearances to what I have here described as existing in the cricoid cartilages, on the surface of the bone denuded of its periosteum. This was not a disease of the epiglottis, glottis, or of the trachea. The whole of the mucous membrane of it was sound. There was, however, in addition, a considerable amount of œdema on the folds of mucous membrane on the sides of the epiglottis (the aryteno-epiglottidean folds).

Secondary syphilis of the windpipe may exist in two situations, in the cartilages, and in the mucous membrane. The voice becomes hoarse and unpleasant; the breathing more or less difficult, more or less spasmodic; with cough, or rather a hawking up of pus, mixed with blood, and sometimes small sloughs. In the commencement of the disease in this case, the voice was very much altered; in the latter stages, it was altogether destroyed. The patient is also generally much emaciated; and there is also frequently an enlargement of the parts. It is true, in this case the emaciation was extreme, and therefore it would give the appearance of greater enlargement than really existed; but the larynx was quite one-half larger than it ought to have been.

Syphilitic diseases of the windpipe are always preceded by other symptoms of constitutional syphilis. The patient I am speaking of had a primary sore, then skin disease, then throat disease, then phagedenic ulceration of the fauces; then the windpipe was affected. There is, in fact, a connecting link of symptoms all through.

There is little to be said as to remedial agents in such advanced stages of disease as that of which I have just spoken; but these conditions of the windpipe are immediately preceded, and generally for long periods, by other symptoms of constitutional syphilis which are curable; and these symptoms are seated in the throat, fauces, and pharynx, in the various forms of ulceration. It is easy to conceive, when we reflect upon the continuity of the mucous membrane of the throat and larynx, how very probable it is that ulceration of the throat and palate, continuing year after year, should ultimately, in many cases, extend to the windpipe and the œsophagus; and this is actually the case. One of the most troublesome and dangerous forms of throat disease is that with which the patient whose case I have just detailed was affected, viz., secondary ulcerative phagedena.

There are several modes proposed of arresting this kind of phagedena; one is by the application of strong acids. Strong nitric acid has been recommended for this purpose. When used, it requires great care in its application. If the ulceration is extensive, it requires still greater care, and should be applied only to a small part of the diseased surface at a time. The fumes should be suffered to escape before the acid is passed into the fauces: carelessness on this point has produced fatal asphyxia. I prefer the hydrochloric acid: it is safer, and certainly more efficacious.

The late Mr Carmichael, of Dublin, has laid great stress upon the application of acids. The ulceration may be arrested by other means; nevertheless I believe it is perfectly safe to apply acids in small quantities to diseases of this kind, using the precaution I have mentioned. Nitrate of silver, again, has been employed in the treatment of such forms of disease. I have never seen any great benefit result from it; but I have seen it beneficial by applying it as a gargle to wash out the fauces, in the proportion of one grain to the ounce of water. It is good applied in that way, and is harmless to the patient. The remedy which I have seen do more good to phagedena of the fauces than any other is kreasote diluted, and applied as a gargle to the throat. The gargle may be made by having about ten drops in half a pint of water; or four or five drops of kreasote may be mixed with an ounce of honey, and applied to the throat by placing it on the end of a brush. These are both good remedies. There is another, which is perhaps of still more importance as an application to the fauces, that is, the fume of the grey oxide of mercury: a small quantity daily used in this way is a remedy of great power. Now I come to another question, and it will be remembered I am speaking of phagedena of the fauces, because you find it almost invariably precedes disease of the windpipe; and therefore the treatment of these antecedent symptoms is important, in preventing the spread of the disease to the larynx. The question arises, In what form should mercury be used; or should it be used at all?

A case was admitted recently into the Queen's Hospital, of extensive phagedena of the fauces. The man appeared in tolerably good health, and he had been treated with the chlorate of potass and various remedies, without success. He was directed to wash the throat with the kreasote lotion; he was placed on good diet, and rubbed in small quantities of the unguentum hydrargyri fortius under the armpits, and the fumes of the grey oxide of mercury were directed into the throat every morning. In about three weeks, the cure was perfect. That was about twelve months ago. I have seen the man since, and he remains very well. With regard to external applications, in the shape of blisters, counter-irritants, or similar remedies, they are of little or no benefit. Mr Carmichael proposed tracheotomy as a mode of curing venereal ulceration of the mucous membrane of the windpipe, on this principle, that the constant current of air kept up the ulceration; and he contended that no remedies had much chance of curing, whilst the ulcerated surface was constantly exposed to a current of air. Therefore he recommended that the windpipe should be opened below the ulceration, a tube put through it, and thus give the ulceration time to heal by diverting the current of air through another channel. But it is necessary, that in such case there must be disease of the mucous membrane, and not of the cartilages.[1]

In such a case as that just related, tracheotomy could hardly be attended with more than a momentary benefit. Mr Carmichael has related one or two cases of success by opening the windpipe, and he refers to Mr Porter of Dublin, who wrote an excellent book on the windpipe, as corroborative of the benefit of tracheotomy. On referring to Mr Porter's work, however, you will find that gentleman's opinions are very different indeed; and I quite agree with him in what he says. He says that if you have approaching asphyxia, produced by the situation of the ulcer, you are perfectly warranted in protracting the patient's life by tracheotomy; but, at the same time, he thinks it unwarrantable in the early stages of the disease, where so much may be done by other remedies. Certainly, tracheotomy is not to be thought of under ordinary circumstances, or in the earlier stages of the disease, and is only to be adopted with the view of relieving immediate and distressing symptoms. Moreover, it is, as I have said, only of use where the mucous membrane is affected; and it is of no use where the cartilages only are attacked, except suffocation be threatening.

---

[1] A patient was operated upon by Dr Hamilton, in Stevens' Hospital, Dublin, for obstruction in the glottis, produced by syphilitic disease of the cartilages of the windpipe; the arytenoid cartilages had exfoliated. The immediate or urgent symptoms of suffocation were relieved by the operation, and the patient was discharged, wearing a tube in the trachea: the canal of the glottis was not restored; it remained impervious to air, or nearly so.—'Dublin Hospital Gazette,' March 16, 1860.

I have paid some attention to these points; and perhaps have occupied time by touching on subjects having no direct relation to syphilitic disease of the windpipe itself, but have digressed by noticing other symptoms which I regard as most important in reference to it. Phagedenic ulceration of the fauces is a very important disease, not only in itself, but in its consequences; that is, the ulceration is likely to extend into the larynx and œsophagus. I have mentioned remedies generally useful in such states, and which I am inclined to recommend from experience in their use and from their known benefit; namely, weak solutions of nitrate of silver, kreasote, hydrochloric acid, or the liquor hydrargyri pernitratis, as local remedies; with the mercurial fume, frictions, or baths, with large doses of the iodides of potassium, sodium, or iron, as constitutional ones. I know a case in which ulceration of the fauces was removed after the patient was immersed in the bath three times. I have shown that with regard to phagedena of the throat, it may be arrested and cured. In speaking of the case of syphilis just detailed, we see the man had primary disease, then skin disease, then throat disease, then disease of the windpipe. It is the treatment of the first attack of syphilis upon which the protection of the patient in after-life depends. It is a difficult and uncertain, though not an impossible matter, to cure syphilitic ulceration of the windpipe, or necrosis of the cartilages of the larynx. But if the patient applies with the symptoms which precede such diseases, it is but rarely that he may not be put in a good state of health, and the more serious and complicated diseases which sometimes follow prevented. Many persons, I know, have denied the possibility of curing constitutional syphilis at all; some say that it is never eradicated. Now, that it is never eradicated if the patient does not undergo a proper treatment, I am quite prepared to admit; but that it may be eradicated by the means I propose, I am no less certain.

CHAPTER XXIX.

ON SECONDARY SYPHILIS AS IT AFFECTS THE UTERUS.

I HAVE already alluded to primary syphilitic ulcers of the uterus; but, in addition to these, there is a class of morbid actions to be found in the uterus, which appear to be dependent on the existence of a confirmed constitutional taint, whose presence in the system is marked by other symptoms apart from those which are found in the uterus, which are of an undoubted syphilitic nature, such as ulcerations of the throat, eruptions upon the skin, and others of a like character. It is beyond all question certain that secondary syphilis attacks the uterus, and the symptoms about to be mentioned are found in the uterus, very frequently in the cases of those who exhibit other symptoms of secondary syphilis. These secondary syphilitic affections of the uterus are of especial importance in their relation to conception and pregnancy, and to the health and life of the fœtus *in utero*. Such conditions of the uterus are not a hindrance to conception, but it is extremely improbable that pregnancy should attain its full period, or that a healthy child should be born under such circumstances, even if the father be free from a syphilitic taint. By referring to the tables of Dr Mackenzie, which will be found at p. 1035 of the 'Association Journal' for 1854, it will be seen that two children only out of twenty-two births could be considered healthy when born of women thus diseased, and seventeen of the children died at very early periods after birth; the greater number of whom exhibited unequivocal symptoms of syphilis. The fourteenth case recorded by Dr Whitehead at p. 133 of his work already alluded to, is a well-marked illustration of the position just laid down. In this case the patient was diseased by her husband; she was never pregnant, had indurated sores, a puriform discharge from the vagina, enlarged nucleated glands in the groin, scaly eruptions on the face, forehead and arms, and a sore throat. She became pregnant by a second husband fifteen years after having been diseased by the first, and gave birth to a child, which in the fourth week after birth became covered with scaly blotches; the voice was husky, the breathing snuffling, and the mouth and lips sore. The child died. On examination of the mother, the cervix uteri was found unusually large and firm; the boundary of the orifice was covered with granulations, which appeared to extend into the interior of the organ; the outer margin of this ulcer was a defined wavy elevation, external to which the surface of the cervix was of a dark red colour. The discharge had never disappeared during the whole interval of time mentioned.

On examining the wombs of those females who exhibit symptoms of constitutional or secondary syphilis, certain alterations will be found, which, as far as my own observations go, I have found pretty constant, and which, when other symptoms are present, must be considered as due to syphilis. But an important question arises, whether such symptoms are ever found in the uterus, if the patient has never had syphilis; or whether these symptoms, being found in the uterus, and no other symptoms of syphilis elsewhere, we are warranted in pronouncing them as syphilitic.[1]

The symptoms found in the uterus of females who have other symptoms of secondary syphilis, are: 1. Purulent discharges; 2. Enlargement and tenderness of the whole vaginal portion of the uterus, or one segment only, generally the lower; 3. Patches of redness, sometimes of a very dark colour; 4. Ulcerations varying in size and appearance. Perhaps one of the most frequent symptoms attendant on secondary syphilis is a purulent or muco-purulent discharge from the uterus itself. This discharge is present in a great majority of females labouring under confirmed lues; sometimes it is present without other symptoms, but, much more frequently, under such circumstances, is associated with greater or less enlargement of the neck, with more or less eversion of the lips of the uterus, and with certain alterations of the mucous membrane, consisting in red patches, excoriations, or superficial ulcerations. I believe this discharge to be, under such circumstances, a symptom of secondary syphilitic disease of the uterus. It is true such a discharge may be a simple leucorrhœa, or it may be due to gonorrhœa, or it may be symptomatic of a concealed chancre of the canal of the cervix; but where it occurs with a constitutional taint, and where it is associated with those other morbid changes I have alluded to, and where, again, the patient was free from such discharges till she became diseased, there can be little reasonable doubt of its nature. "In every instance where the mothers of syphilitic infants have been under treatment, the existence of syphilitic disease in the uterus, with discharge containing more or less of pus, has always been found." (Whitehead, 'Third Report of the Clinical Hospital, Manchester,' p. 106.) Dr Tyler Smith, at p. 98 of his 'Treatise on Leucorrhœa,' says: "It appears to me that, in almost all cases in which leucorrhœa and disease of the os and cervix uteri are present in women suffering from constitutional syphilis, the uterine symptoms are a genuine manifestation of the constitutional or secondary disorder." Neither the microscope nor chemistry, as far as I know, have yet furnished us with any data which would enable us, by the mere examination of the secretions, apart from the history of symptoms, to found a diagnosis. In reference to this point, Dr Whitehead says that the "stain in venereal affections is different from that communicated by the product of simple ulcerative or inflammatory action; although in what this difference consists, chemically, I do not exactly know."

---

[1] The syphilitic virus is the cause of many diseases of the uterus. The observations which I have made and the facts which I have collected at the Lourcine Hospital do not permit me to entertain a doubt on this subject. The very remarkable labours of Dr Bernutz, which he has given an account of before the Medical Society of Hospitals, have thrown new light on this subject. M. B. has clearly demonstrated that syphilis of the uterus assumes many varied forms, and frequently appears with symptoms very analogous to those which the syphilida assume on the surface of the skin. Becquerel, 'Traité Clinique des Maladies de l'Uterus et de ses Annexes,' Paris, 1859, tom. i., p. 185.

I could adduce a great number of cases in support of the views I have just set forth, did time and the limits of this chapter permit. I may be perhaps permitted to allude to one or two, which present some features of rather peculiar interest. A patient consulted me, some months ago, respecting some superficial ulcerations of the penis, which invariably made their appearance on the day after intercourse with a female with whom he lived *par amours*, but to whom he was not married. He was most anxious that she should be carefully examined, and she was sent to me for that purpose. She had the remains of an old syphilitic eruption upon her. I could detect no further change in the uterine organs than a profuse muco-purulent discharge. She subsequently became pregnant. In the sixth month of her pregnancy, she was delivered of a dead and putrid fœtus. I have watched this case for four years. The patient has miscarried twice, and has been prematurely delivered of two dead children. The uterine discharge has never ceased during the whole period.

A girl, of very healthy constitution, was admitted, under my care, into the Queen's Hospital, in September, 1857. She had indurated chancres of the labia, enlarged glands in the groin, a well-marked eruption of syphilitic lepra, and a profuse vaginal discharge. On examination, the whole of the vaginal portion of the uterus was found swollen and intensely red: this redness ran into the canal of the cervix, from whence issued a most profuse muco-purulent discharge. The symptoms of syphilis disappeared after a prolonged treatment, which had no effect on the discharge: it subsequently yielded, and almost altogether disappeared, under one or two cauterisations of the orifice of the uterus with the nitrate of silver, and the application of a pledget of lint to the upper portion of the vagina, soaked in a solution of the chlorate of potass, in the proportion of a drachm of the salt to half a pint of water.

These secondary syphilitic uterine discharges are, perhaps, of all the symptoms of secondary syphilis, the most troublesome and difficult to cure. In fact, my object in alluding to the last case was chiefly to show that the treatment which generally succeeded in removing the external manifestations of syphilis had frequently little or no effect on those discharges from the uterus which have been deemed of a syphilitic nature; and this is constantly the case. They require a combination of both local and general treatment. Local treatment will not remove them without constitutional treatment; neither will the latter succeed without the former. Sometimes they are rebellious to all treatment; and this may possibly depend upon the location of some mischief in the interior of the uterus, beyond the reach of remedies. In this respect, they may resemble those chancres situated in the interior of the bladder which have been described by MM. Ricord and Vidal de Cassis.

These difficulties in treatment have been noticed by other observers. Dr Mackenzie, in reference to this point, says: "Moreover, in determining the relations of these discharges to syphilis, there is this additional difficulty, that the actions of the disease are both local and constitutional; and hence abnormities in regard to these secretions may arise from the local irritation of the disease, rather than from its more specific and constitutional action." These remarks just state the difficulty with regard to treatment; and I venture to assert that the most judiciously framed general plan has little or no effect upon the particular symptoms I have alluded to, without the aid of topical medication.

These discharges may continue through a long series of years; in the case quoted from Dr Whitehead, for seventeen years, doubtless, of a syphilitic nature; for a diseased child was born at the end of this period, and no other symptoms of taint discoverable either in father or mother, except those seated in the uterus. This is not surprising, when it is considered that, when medical men treat secondary syphilis in the female, the uterine organs are very rarely examined, unless some special circumstance direct their attention that way. And, again, vaginal discharges, from a variety of causes, are so common in females, that they commonly attract but little attention; and, even if their existence be inquired into by the surgeon, it is most frequently denied by the patient.

It will be found, on examination, that a great number of patients suffering from secondary syphilis, I believe the majority, have the neck of the uterus very much enlarged; and this enlargement is, in many cases, so marked as to constitute a distinct and positive abnormity. This enlargement or hypertrophy will be found more frequently to affect the lower segment or lip of the uterus, than the upper; and that frequently in a very marked degree. The mucous membrane covering the uterus so affected may not present many very marked deviations from the healthy condition; but more frequently it does so. The mucous membrane looks red, shining, or excoriated, not a generally diffused redness, but in patches: some of these patches have a deep livid colour, and generally they have a tendency to run towards or into the orifice of the womb itself.

There is little doubt but these symptoms are due to syphilis. If the patient have at the time other marks of constitutional disease, it amounts to little short of absolute certainty; or if, again, the uterus be examined soon after the disappearance of the other symptoms, and such conditions of the uterus are found, they may be pronounced syphilitic; for it must be borne in mind that the symptoms of uterine syphilis will remain for long periods after the apparent cure of other minifestations of the disease. The discharges from the os uteri, to which I have just referred, are also most commonly associated with this enlargement of the neck, and the changes just mentioned in the appearance of its mucous membrane. In the married female, or in those who have borne many children, hypertrophy of the neck of the uterus may probably be attributed to other causes; but, as I have said, the simple hypertrophy seldom exists alone, without the other symptoms I have mentioned: and, again, this enlargement is equally well marked in syphilitic females who have never borne children. Dr Whitehead says: "When the lower section of the uterus, in a state of hypertrophy, presents a dark red surface, somewhat variegated or mottled, or measly, and especially if it appear tense and glistening, it may pretty confidently be asserted that the patient has a syphilitic taint, and that she will be liable to transmit the evil to her offspring." (P. 291.)

The symptoms of secondary syphilis, as they affect the uterus, consist chiefly in discharges from the os, enlargement of the neck, with redness and superficial ulceration affecting the neck externally, as well as the orifice and canal of the cervix. These symptoms are rarely met with singly; they are frequently all present; but two or more generally coexist. It may be asked, Are these pathognomonic of the existence of syphilis in the system? Would it be safe to assert that such symptoms are syphilitic, apart from the existence of other and the more well known manifestations of the disease? It may be answered, that such conditions of the uterus are infrequent, apart from either the present or antecedent symptoms of syphilis. I have already said that, in secondary syphilis in the female, the uterus suffers in about sixty per cent.: probably the throat suffers in about an equal degree. We know that ulceration of some part of the throat is common in secondary syphilis; but it is not met with in all cases.

If the state of the uterus be examined in patients who have never had syphilis, the symptoms I have mentioned, or others closely resembling them, are not found, or rarely found; whilst in syphilis they are, as we have seen, pretty constant. "Mr Pollock, in a paper read before the Medical and Chirurgical Society in 1852, stated that, on examining the uterus in 583 women who had died of various diseases, in only 23 was the mucous membrane of the cervix or os found diseased or altered. In 708 cases of persons dying of various diseases examined by Dr Boyd, of the Marylebone Infirmary, 13 only had congestion or inflammation of the uterus. Dr Allen, of the same institution, and Mr Prescott Hewett, of St George's, have also investigated the condition of the uterine organs in a great number of persons dying of various diseases, and they respectively concur in the statement that these lesions of the cervix are rarely met with."—(Mackenzie, p. 1055.

If a female give birth to a syphilitic child, and on examination the uterine organs present the symptoms I have described, I think, although no other symptom be present, we may safely declare them syphilitic, and recommend a course of treatment to prevent a similar occurrence on the part of the offspring, in the event of future pregnancies. These symptoms in the uterus, however conclusive they may be as far as the mother is concerned, would not, if cured, necessarily prevent the future birth of diseased children, unless the health of the father be determined. (See the chapter on Infantile Syphilis.)'

I have already remarked that general treatment, apart from local, rarely succeeds in curing syphilitic diseases of the uterus, whether these be primary or constitutional.

If the disease assume the character of a primary sore, of which I have reported several instances, there is no reason why such sore may not be treated locally in the same way as chancres situated in other parts. For instance, it may be destroyed with caustics, such as the nitrate of silver, or the acid nitrate of mercury: these may be applied with perfect safety through the speculum where the ulcer is situated on the lips or on the external portion of the os uteri. The latter caustics may be easily applied on a camel-hair pencil, or on a small pledget of lint; but, in the event of liquid caustic being used, care should be taken that no more is put on the brush or lint than is required, and that none of the caustic drop on the healthy portion of the vagina.

After the application of the caustic, a soft pledget of lint should be soaked in some weak astringent lotion, such as sulphate of zinc, or acetate of copper with alum, in the proportion of about two grains of the salt to an ounce of water. This should be gently placed over the whole vaginal portion of the uterus, and renewed daily.

The patchy shining condition that I have spoken of may be pencilled over with a solution of nitrate of silver, in the proportion of a drachm to the ounce, and then dusted over with calomel. If there is an extended, spongy, granular, secreting surface, equal parts of calomel and alum may be used; and afterwards some dry soft lint, or charpie, placed over the whole. The lint should be changed, and the dressing of calomel, or calomel and alum, renewed daily. The purulent or muco-purulent discharges from the uterus, which so constantly complicate secondary syphilis, are exceedingly difficult to cure. Simple vaginal injections have little or no effect on them. Such discharges may be symptomatic of disease in the canal of the cervix, or probably still further in the interior of the uterus: I have previously alluded to cases where no reasonable doubt could be entertained that ulceration existed in the canal of the cervix. Vaginal injections fail, because they do not reach the seat of disease; the os itself being commonly occluded by discharges of various kinds. In order to do any good in such cases, these discharges should be carefully washed away by means of a syringe used through the speculum. A stream of tepid water may be directed against the os till all the discharge is washed away; or a soft piece of sponge or lint may be dipped in warm water, and the secretions cleaned away with it. When this is done, a stick of nitrate of silver may be introduced into the canal of the cervix, and the whole surface well cauterised with it; or a camel-hair brush may be dipped in a dilute acid nitrate of mercury, and the same parts well dressed over with it. These remedies are perfectly safe; I have used them hundreds of times, without the least accident. I mention this simply on account of some unfavourable results which have been said to attend the intra-uterine injections practised by the late M. Vidal, to which I shall presently allude.

In addition to the cases of presumed chancre of the canal of the cervix uteri which I have already mentioned, M. Robert has cited four cases of discharge from the os, which yielded a characteristic pustule when tested by inoculation; from this fact it was believed that such discharges were symptomatic of chancre situated within the canal of the cervix uteri. There was no external trace of ulceration, and the successful inoculation of the pus discharged was the only symptom which led to the suspicion of the existence of such chancres. (Quoted from a paper by Dr Achille Dron, in Diday and Rollet's 'Annuaire de la Syphilis,' &c., p. 220.)

In those uterine discharges which complicate secondary syphilis, intravaginal injections may be employed through the speculum with great benefit. The os uteri should be well brought in view, and a continuous stream of fluid thrown directly upon it. The fluid used may be a solution of nitrate of silver, very weak (four grains to the pint), a weak solution of sulphate of zinc, of acetate of copper, or of alum, or a strong decoction of the walnut-tree leaf.

These injections should be used about twice a week. They have an advantage which no one can dispute; they free the neck of the uterus from mucosities and secretions, which are more or less acrid, and which may exert a greater influence in perpetuating ulceration than is generally imagined. (Vidal, Blackman's translation, p. 182.)

After the injection, a pledget of lint should be placed over the os, which should be changed daily.

In very obstinate cases, where the disease is located in the canal of the cervix, or even still deeper, injections may be practised through the os tincæ into the canal itself. If the quantity of injection used be small, and the injection carefully made, this may be done with perfect safety. Such injections have occasionally been followed by abdominal and pelvic pains, which have been more or less acute, have continued for longer or shorter periods, and then disappeared. These injections may be made through a small elastic gum catheter, or canula, one end of which is introduced into the uterus, and the other connected with a small syringe. The most convenient injection is a solution of the nitrate of silver, in the proportion of one grain to four ounces of water; of this one drachm is to be used for each injection. The injection must be made slowly and without force. This may be repeated as frequently as may be thought necessary, and the strength increased if required. Much additional and valuable information on "Intra-uterine injections in various forms of disease" will be found in the late M. Vidal's work, 'Maladies Vénériennes,' chap. iii.

The general conclusions that I feel disposed to come to, from the facts just detailed, are—

I. The uterus is capable of being primarily inoculated with syphilis, in the same way that we observe similar occurrences take place on the penis and elsewhere. That such primary sores may be situated on the external portions of the neck of the uterus, within the os or canal of the cervix, or probably still more deeply; that these occurrences, as far as they have been at present observed, are rare; but as structure in other parts exerts a very powerful modifying influence on the appearance of a chancre, that these primary sores on the uterus may be more frequent than has hitherto been imagined.

II. Like other parts, as the throat, skin, and elsewhere, the uterus is liable to be attacked with the symptoms of secondary or constitutional syphilis, which are distinct from the primary disease; that these symptoms are found in more than half of the patients who suffer from confirmed lues; and that the symptoms which characterise them are pretty uniform; consisting in discharges from the canal of the cervix, general or partial enlargement of the neck and lips of the uterus, with congestion and inflammation, and superficial ulceration of these parts.

III. These symptoms are most likely syphilitic, since they are found in the cases of those who labour from confirmed syphilis; but are not found in anything like an equal degree in persons labouring under diseases which are not syphilitic.

IV. The symptoms of uterine syphilis will remain for years after the disappearance of the other symptoms; and this condition of the uterus is the source of infection to the fœtus, even when the female is pregnant by a man who has never had syphilis.

V. The examination of a female labouring under confirmed lues should never be considered as complete till the uterine organs have been thoroughly inspected; and, in reference to treatment, it may be asserted—

VI. That no treatment is likely to be successful which does not combine topical medication of the uterus with any constitutional remedies that may be indicated or thought necessary.

The facts and opinions which I have stated in the foregoing chapter have recently received ample confirmation from the researches of M. Bernutz at the Lourcine Hospital: these researches have been corroborated and witnessed by M. Becquerel. M. Bernutz has not as yet published a detailed account, but he has arrived at the following conclusions:—

The uterus is the seat of syphilitic symptoms of varied character, which may be legitimately classed under three heads:

1. Primary diseases, comprising chancres and chancrous balanitis; all inoculable.

2. Secondary diseases, comprehending the following alterations seated on the mucous membrane of the neck: these are red patches, vegetations, erosions, and various forms of the syphilida. They are not inoculable, although they may be contagious.

3. The tertiary symptoms comprise tubercles and gummata.[1]

---

[1] Becquerel, op. cit., page 168.

CHAPTER XXX.

ON THE SYPHILITIC TESTICLE.

THE syphilitic testicle is a totally different disease to that which I have already described under the name of "consecutive gonorrhœal orchitis." The diseases are different in their nature, their symptoms, their pathology; and they require also different remedies for their cure. This affection is commonly called syphilitic sarcocele, and also the syphilitic or venereal testicle.

Symptoms. Diagnosis.—When a gradual enlargement of the testicle comes on without pain in individuals who have suffered from a well-marked constitutional syphilitic taint, however long such symptoms may have disappeared, and whether any other symptom of secondary syphilis be present or not, there is reason to suspect that the disease in the testis may be of a syphilitic character. This enlargement takes place gradually, without pain in the part, and without pain in the back or loins. When it is handled, there is little or no tenderness present, unless the organ be firmly pressed. The tumour is smooth and heavy, occasionally, however, lobulated or uneven on its surface, and in its more advanced stages no trace of the epididymis can be felt, and the spermatic chord appears quite free from disease. There are many other diseases of the testis with which the syphilitic testicle may be confounded, and from these it is of the first importance to distinguish it, since in a majority of cases this disease is very amenable to treatment, and the records of surgery show that many testicles have been removed under the suspicion of their being cancerous, which were, in fact, nothing more than ordinary syphilitic sarcocele, occurring as an isolated symptom of secondary syphilis long after any other manifestation of this disease. The diseases with which syphilitic sarcocele may be confounded, are: 1. Chronic inflammation and enlargement of the testes from causes which are not syphilitic. 2. Scrofulous enlargement of the testes. 3. Scirrhus of the testes; and chronic consecutive gonorrhœal orchitis. I think it is hardly possible to confound this disease with either hydrocele or hæmatocele.

Whenever gradual enlargement of the testes takes place without any evident cause, and under the circumstances already mentioned, and the patient has previously suffered from symptoms of constitutional syphilis, there is great reason to believe the disease syphilitic, and such a supposition should always be acted upon before any more active measures be resorted to, particularly those which have relation to any operative procedure. In the more acute forms of consecutive gonorrhœal orchitis, the testicle is red, shining, and intensely tender and painful; in the syphilitic sarcocele, the tumour is indolent from the commencement, is not painful, and is not tender even when hardly pressed. In the more chronic forms of consecutive gonorrhœal orchitis, there may be no tenderness or pain, but the tumour is not heavy or smooth, like syphilitic sarcocele, and the epididymis, to which the enlargement in the former case is chiefly confined, may be distinguished separately from the body of the testis itself.

With the scrofulous testis, and simple chronic enlargement of the testis, syphilitic sarcocele may be confounded, without great care in the analysis of the history of the case. The effects of treatment, however, will frequently clear up doubts when any exist on this point.

"Though a late symptom," says Mr Hamilton,[1] "yet between it and the primary affection there is generally a chain of connection by some well-marked secondary affection (not always). When the sarcocele is unaccompanied by these, their previous existence and history help to distinguish it from simple chronic enlargement, from which there is otherwise no local difference or mark of distinction."

This disease very often occurs as an isolated symptom of constitutional syphilis, when the patient has been supposed well, for years; and these are just the cases, where the health is otherwise good, that constitute the difficulty in diagnosis. At other times the disease is associated with the sloughing ulcer of the pharynx, with various forms of skin disease, or pains in or disease of the periosteum and bones.

---

[1] 'Essays on Syphilis—Syphilitic Sarcocele.' By John Hamilton, Surgeon to the Richmond Hospital, Dublin.

The syphilitic sarcocele, although easily distinguished from simple hydrocele of the tunica vaginalis, is sometimes complicated with a small effusion of fluid into this part, and then the disease is named hydro-sarcocele. This form of hydrocele does not require operation; if a trocar be pushed into it, the body of the testis is sure to be wounded; the fluid is generally absorbed as the testicle approaches the healthy condition. Should it not do so, the fluid is easily evacuated by puncturing the scrotum with a fine needle.

In syphilitic hydro-sarcocele, the testis is large, the fluid small; in ordinary hydrocele, the size of the testis is not increased, and the collection of fluid large; a precisely opposite condition to the former.

The syphilitic testicle may certainly be mistaken for certain forms of scirrhus of this gland. Dupuytren, Ricord,[1] and M. Helot,[2] believe that numbers of testicles have been amputated under the suspicion of their being cancerous which were syphilitic. The condition of the inguinal glands will sometimes, but not always, assist us in forming a diagnosis on this point, as the absorbents of the testes open into the lumbar, and not into the inguinal glands.

Pathology.—In one form of disease the effects of chronic inflammation only are detected, and this has been termed by Mr Hamilton, "simple syphilitic sarcocele." It consists in the "deposition of firm lymph, of a pale yellow colour, into the interstitial cellular tissue external to the tubuli testes, as well, probably, as into the tubuli themselves."[3]

---

[1] 'Gazette des Hôpitaux,' Aug. 25, 1846.

[2] 'Gazette Médicale,' Oct. 18, 1845.

[3] Syphilitic sarcocele occurs under two forms: one of chronic or subacute inflammation of the testicle and its coverings; the second of a specific character, in which a change of structure or deposit of a specific morbid character takes place in the substance of the testis itself.

In this form of sarcocele, the marks of inflammation are found both in the testicle and its coverings ; the tunica albuginea and the tunica vaginalis become thickened and adherent, or a small collection of fluid takes place in the latter. In the testicle itself the inflammation attacks the tubuli seminiferi, the coats of which become thickened, and in the advanced stages of the disease completely atrophied, and converted into a homogeneous semi-tendinous mass, in which all trace of the tube is lost. In addition, a deposit of lymph takes places between the tubuli. There is little vascularity, and little tendency to softening or suppuration. The testicle diminishes in size, and becomes indurated. As this form of disease is generally curable by appropriate treatment, few opportunities of examining the part are met with. Virchow states that during the outbreak of cholera in 1848, he had opportunities of examining the testes of several syphilitic patients who died of the epidemic.

"A much more common pathological appearance of syphilitic disease of the testicle, is the presence of one or more tubercles in the epididymis or body of the testes. These tubercles are of a yellow colour, of a consistence rather less firm than that of coagulated lymph. Very small at first, they gradually enlarge, and, according to their duration, may vary from that of a hemp-seed or split-pea, to that of a chestnut, or even larger. They have a well-marked cyst, which can, by careful dissection, be separated from the yellow inorganic substance contained in them, and from the glandular substance of the testes in which they are imbedded. The yellow substance with the cyst has sometimes a laminated arrangement. In some preparations the yellow tubercle has gradually so increased as to have caused absorption of the glandular structure of the testicle, and, finally, to have taken its place."

"When the progress of the yellow tubercle is not stayed by treatment after having attained a certain size, it begins to soften in the centre, or at the side nearest the surface of the testicle, where it causes an inequality ; adhesion takes place between the tunica vaginalis and scrotum, and at last, these structures, with the tunica albuginea, give way, and the surface of the tubercle becomes adherent to the skin of the scrotum. Suppuration of a slow, indolent character ensues, the abscess bursts, and discharges very little matter, and very thin, and terminates in fistula or lipoma, and total disorganisation of the testicle: the same disorganisation may occur without any suppuration. The tubercles are absorbed, but, at the same time, the glandular structure of the testis disappears; nothing remains in the place of the atrophied testicle, but a hard, irregular, fibro-cartilaginous, contracted mass, in which ossific matter is sometimes deposited.[1]

From the ulcer in the scrotum produced by the bursting of the abscess occasioned by the softening of the yellow tubercle, there frequently protrudes a soft, granular, fungoid mass; this is fungoid syphilitic sarcocele. This does not always take place: I have frequently seen cases where a process of slow softening or suppuration has taken place in the testicle in syphilis; an abscess bursts externally, and continues to discharge, but no fungus protrudes. I have seen this take place in both testes; the fistulæ thus produced continue to discharge small quantities of pus, the glands atrophy and harden, no spermatozoa are found in the pus thus discharged, and the virile power is quite destroyed; thus a so-called "spermatic fistula" is produced, which is anything but spermatic, since none of the elements of semen can be detected in the pus, and, in all probability, the secreting structure of the testes is altogether destroyed. A gentleman who had suffered from various forms of constitutional syphilis for some years, perceived, one day after riding, one of his testicles somewhat enlarged, and, after a short time, the other also. The swelling gradually increased, without pain, till each gland had acquired the size of a large lemon; a small abscess formed in each testicle, without pain, broke and discharged. Various plans of treatment were resorted to, with little success: the testes were not reduced in size; the abscesses gradually discharged less and less, till only a few drops of pus occasionally appeared. I examined the discharge from the testes frequently, but never detected any trace of semen. In this state my patient married: he had firm erections, but emission never took place. Shortly after this he died of apoplexy. I believe that in this case the whole secreting structure of the testes was destroyed by the effects of chronic inflammation, and the deposit of lymph both in and around the tubuli seminiferi: this appeared to be proved by the absence of semen in the discharge from the abscess, and the want of emission during sexual intercourse.

---

[1] 'On Syphilitic Sarcocele,' by J. Hamilton, Surgeon to the Richmond Hospital, Dublin, pp. 21, 22, 25. See also Virchow, op. cit., chapter iv.

CASE XXXIX.

Fungoid syphilitic sarcocele; cure by mercurials and the iodide of potassium.

A patient, about thirty years of age, was sent to me by Dr Henry Porter, of Peterborough, in 1858, who had suffered for some time from syphilis. He had had a phagedenic chancre and an ulcerated throat: these symptoms yielded to the use of the iodide of mercury, the iodide of iron, and cod-liver oil. About two months after the disappearance of these symptoms, he re-applied to Dr Porter, with "an enlarged testicle, much indurated, the skin being inflamed and tense, in a few days breaking out into a cancerous-looking ulcer, the size of a shilling, which soon increased to that of half-a-crown." In this state he was sent to me. At that time there protruded from the ulcer a soft, granular fungus, as large as a pigeon's egg. He was cachectic, weak, pallid, troubled with night-sweats and pains in the joints. He was directed to take two grains of calomel and one of opium every night, and decoction of bark with the iodide of potass in the day; the fungus was dressed with an ointment composed of one drachm of the ung. hyd. nit. oxyd. and half an ounce of zinc ointment. Subsequently the treatment was a little modified: the calomel was changed for blue pill, and the quantity of opium increased; the iodide was continued. "Under this treatment, the ulcer and fungus in the scrotum entirely healed and disappeared, the testicle assumed nearly its natural size, and his health improved, the rheumatic pains giving way very gradually."

It frequently happens that medical treatment has little or no effect on fungoid syphilitic sarocele, although the disease is occasionally curable. In many cases the testicle is so completely disorganised, that there is no remedy but castration; the diseased parts must be removed by the knife. I have been compelled to perform this operation in several instances. Mr de Méric has recorded a case of fungoid syphilitic sarcocele; M. Rollet, of Lyons, several;[1] and Mr West, one.[2] There can be no doubt as to the syphilitic origin of these diseases of the testes; they arise late in the history of a venereal taint, but have always been preceded by marked symptoms of syphilis; these symptoms may be present at the same time as the disease in the testes, or no symptoms of syphilis may have occurred for years. Where a testicle slowly enlarges without pain, and the patient, at any former period of his life, have had well-marked constitutional syphilis, especially if he has suffered from extensive ulceration in the throat, there is always a suspicion that the disease in the testis is of a syphilitic nature; and the patient should be placed on an anti-syphilitic treatment, by mercury and the iodide of potass. In many cases this will succeed in curing the disease, especially in its earlier stages, and in the simple inflammatory forms without change of structure. Even in the earlier stages of the deposit of the yellow tubercle, we may be successful; but where this has proceeded to softening, little benefit can be expected from treatment of any kind.

The virile power is not affected in the early stages of syphilitic sarcocele, unless the disease extend to both testicles; but in the advanced stages, or in protracted cases, especially where suppuration has taken place, and an ulcer or fungus formed, the virile power is always more or less weakened. The desire for intercourse is not lost, neither is erection much weakened; but the ejection of semen does not take place, simply from the fact that the glandular secreting structure of the testes is destroyed. I believe that when this is the case, the secreting power of the testes is never recovered. I have watched several cases of this kind for some years, and no improvement in virility has taken place. I have repeatedly examined the discharge from spermatic fistulæ in these and similar cases, but never in one single case have I been able to detect any spermatozoa.

In the earlier stages of what has been described as simple syphilitic sarcocele, local depletion by means of a small number of leeches may be employed, if much tenderness be present. The patient should at once be placed upon a mild mercurial course, suited to his age and constitution. He should take calomel and opium at night, or blue pill and opium; with iodide of potass in the day, with bark or sarsaparilla. If cachectic or weak, or troubled with night-sweats, cod-liver oil and iron may be added. In many cases the health has been broken by other symptoms of syphilis, frequently of a formidable kind, especially secondary phagedena of the fauces; and in such states large doses of opium should be combined with the mercurial. Alone, the iodide of potassium will frequently disappoint us, and will not cure the disease. As local applications, frictions, with mercurial ointment and the extract of belladonna, the compound iodine ointment, or the ointment of the iodine of lead, are useful; the two former irritate the scrotum, the last does not, and, therefore, I prefer it. Strapping the scrotum with the cerat. hydrargyri comp. frequently does good. In some obstinate cases I have blistered the testes with great benefit. Where sarcocele occurs as a complication, and other and perhaps more important syphilitic symptoms are present, the treatment passed in review may require modifications to suit the particular circumstances of the case, more especially where the disease of the testes is complicated with the sloughing ulcer of the pharynx or fauces.

---

[1] 'Mémoire sur le Sarcocele Fongueux Syphilitique, par M. J. Rollet, Chirurgien en Chef de l'Antiquaille,'—'Annuaire de la Syphilis, &c.,' page 90.

[2] 'Dublin Journal,' Nov. 1859.

CHAPTER XXXI.

ON CONSTITUTIONAL SYPHILITIC DISEASES SEATED IN THE MUSCLES AND TENDONS.[1]

CASE XL.

Syphilitic tumour in the muscles of the fore-arm.

M. V—— was admitted, under my care, into the Queen's Hospital, in April, 1853. She had had primary sores five years previously, and since that time had suffered from various forms of skin disease, ulceration of the throat, and alopecia. She was admitted for a large circumscribed tumour, which appeared imbedded in the flexor muscles of the right fore-arm; the tumour was as large as an orange, not very tender to the touch, the skin covering it not altered in appearance. I considered it of venereal origin—in fact, a muscular node; it coincided with severe nocturnal pains in the bones of the head and legs. The tumour disappeared after six weeks' treatment by the iodide of potassium and the biniodide of mercury, with occasional blisters, pressure by means of iodine and mercurial plasters, and frictions with the ointment of the iodide of lead. This patient had also another large tumour in the muscles of the thigh, also one on the back. She had also pains in the head. The limbs where the tumours existed were the seat of peculiar cramps; they were undoubtedly of syphilitic origin.

I have described in another part of this work, other tumours of syphilitic origin, which are seated frequently on the tendons near their insertions; M. Lisfranc has described such diseases under the name of "white nodosities of the tendons." M. Bouisson, who has written a very good monograph[2] on syphilitic diseases of the muscles, mentions a case where the tumour was seated in the substance of the tendo Achillis, and was cured by the iodide of potassium. I have seen another tumour of this kind in the substance of the gastrocnemius, and they have been observed by M. Bouisson in many other muscles. M. Bouisson thinks they are peculiarly liable to occur in the tongue and lips. These tumours occur late in the history of a constitutional syphilitic taint, and have, in most cases, been preceded by other and more common symptoms of secondary syphilis, which renders their nature probable, if not certain. The general remedies best suited to such cases, are the iodides of mercury, potassium, sodium, and iron, with the mercurial vapour bath; locally, blisters, and frictions, with pressure: should any attempt at extirpation be made under a mistaken idea as to their true nature, it is all but certain that the wound thus produced would assume all the characters of a syphilitic ulcer.

---

[1] "Tumeurs gommeuses"—"Gummata."

[2] 'Gazette Médicale,' July 11-18, 1846.

The tendons of muscles are subject to the formation of swellings upon them, in consequence of a syphilitic taint, which closely resemble bony nodes. In such cases, the tendon first becomes stiff and painful to move, then tender on pressure; afterwards it thickens and enlarges to a considerable extent, and becomes the seat of a tender, circumscribed tumour, which more or less impedes or totally destroys, for the time, the action of the muscle to which the tendon is attached. These tendinous nodes occur late in the history of a venereal taint, and are commonly associated with or preceded by other symptoms of constitutional syphilis, which leaves little doubt as to their nature. I was consulted by a gentleman who had suffered from constitutional syphilis, in various forms, for ten months; when I first saw him, he had a large foul ulcer on the tongue, and a tumour, as large as an orange, on the tendo Achillis of the left leg. Both symptoms yielded rapidly to the combination of mercurials and the iodides of potass and iron. The dispersion of these tumours, if obstinate, would be much hastened by rest and the application of a blister.

CHAPTER XXXII.

SYPHILITIC DISEASES OF THE PERIOSTEUM AND BONES.

(OSTITIS, PERIOSTITIS, CARIES, NOCTURNAL PAINS, ETC.)

AFFECTIONS of the periosteum and bones constitute a most important class of secondary syphilitic diseases, varying in their nature from pain in the bone simply, without apparent alteration in its structure, to complete destruction and disorganisation.

Pains in the Bones.[1]—These pains are seated in various parts of the osseous system, principally in the bones of the head and extremities; they are generally worse when the patient is warm in bed, but at times they are present in the day also. The parts which are the seat of such pains are sometimes tender to the touch, occasionally hot, or slightly enlarged; in other instances such symptoms are not present, and the disease seems to consist in a lesion of sensibility merely. I do not think, however, that this is the case; or if it should be, the instances are very rare. In the shafts of the long bones, it is exceedingly probable, if not certain, that these pains are due to syphilitic inflammation of the medullary membranes of these bones. I have elsewhere shown this to be the case.[2]

These pains have been supposed by many to be due to the mercury which has been given for the cure of antecedent constitutional syphilitic symptoms. To this it may be replied, that mercury given for the cure of other diseases, not venereal, does not produce such pains; that workers in the fumes of mercury are not so affected; that such pains occur where mercury has never been given for the cure of syphilis, and, again, such pains are frequently cured by mercury.

---

[1] "Douleurs ostéoscopes."

[2] 'On the Nature and Treatment of some Painful Affections of Bone:' Churchill, 1853.

The treatment best suited to these pains consists in the administration of the iodide or bromide of potassium, in full doses, which may be advantageously combined with colchicum and aconite in some cases; also decoctions of the woods, especially the guaiacum, with conium, and opium; if the parts be tender, or the pains fixed and not fugitive, blisters are exceedingly useful: should these all fail, mercury may be tried. This treatment should be associated with simple vapour bathing, or the mercurial vapour bath twice or thrice a week. I have treated two cases with complete success, with full doses of the iodide of potassium and colchicum, and the mercurial vapour bath, where the pains had never been absent for one night in one case for seven, and the other for thirteen years. I think division of the periosteum an uncertain remedy, unless there be well-marked fixed tenderness, and then it disposes to necrosis, or caries of the superficial laminæ of the bone. Where the pain appears to be seated in the medullary canal of the shaft of a long bone, as the tibia, the canal may be opened with safety and success (after the failure of the other remedies), on the plan already recommended and practised by me.[1] The iodide of potassium is the remedy generally prescribed for these pains; it relieves them doubtless, but when omitted the pains return with the usual intensity. I have known it continued for years without producing a cure, whilst they have entirely yielded and never returned after a methodical treatment by mercurial vapour.

CASE XLI.

Nocturnal pains for ten years; suspension of the disease by the iodide of potassium; cure by mercurial vapour.

A gentleman came from the United States to place himself under my care, for severe nocturnal pains of syphilitic origin, which had harassed him for ten years, during the whole of which time he had taken the iodide of potassium. The attacks of pain recurred about every month, and were always relieved and entirely taken away by the iodide of potass; but after this remedy had been discontinued for a week, they always returned. I placed him under the use of mercurial vapour three or four times a week, and administered at bed-time half a grain of the iodide of mercury, with one of opium, each night. This treatment was continued for about six weeks, when the patient left me. Writing to me nearly a year afterwards, he says, "You may remember that it was in November last I first applied to you for advice, and that I was then suffering from one of my painful attacks, which have generally come on once a month for the last ten years. Since the treatment I went through with you, I have no return of these attacks, and have never had any nocturnal pain whatever."[1]

---

[1] Op. cit., 'On some Painful Diseases of Bone.'

CASE XLII.

E. C. entered the Queen's Hospital, under my care, in August, 1851, with various secondary syphilitic symptoms. Her chief complaint was of severe nocturnal pains in the tibia of the right leg, which was somewhat enlarged, and tender to the touch; the pain in the bone was so severe as to prevent rest altogether. She took the iodide of potassium, and the biniodide of mercury, with little or no benefit; blisters afforded, at first, a temporary alleviation from pain for a few days, but at length ceased to afford even a slight relief. The patient suffered so much, that she repeatedly begged of me to amputate her leg. The case was one of secondary syphilitic inflammation, affecting the medullary membrane of the shaft of the tibia, which, in a minor degree of intensity, is, in my opinion, a very frequent cause of pains in the long bones. I determined to trephine the bone, to open the medullary canal, and let the blood flow from the divided vessels of the bone and medullary membrane. This was done, whilst the patient was under the influence of chloroform, on Sept. 21. I opened the medullary cavity with a long crowned trephine. On removing the bone, the medullary membrane, turgid with black blood, which ran from it in a stream, protruded through the opening; the perforation was filled with a piece of soft lint dipped in oil. No medicine was given.

---

[1] "The iodide of potassium palliates these pains more frequently than it cures them without relapse; but, to compensate for this, the relapse, though it be frequent, never fails to obey the remedy."—M. Diday of Lyons, 'Dublin Journal,' May, 1854, p. 487.

On the 24th, the pain was no longer felt; the opening closing rapidly with new bone.

On Nov. 7, I removed a second piece of bone with the trephine, which was carious; and in doing so, I penetrated the medullary canal a second time. Not the slightest constitutional disturbance followed either operation. The patient left the hospital well on Oct. 10th.

Those enlargements of the bones, termed nodes, appertain to the natural history of the progress of constitutional syphilis, if suffered to go on unchecked by remedies; and they most commonly succeed to the pustular forms of secondary syphilis, and are very frequently associated with rupia and secondary phagedena. Nodes arise as a consequence of primary venereal ulcers, when the disease has become constitutional from the absorption of the poison, and the poison has penetrated very deeply into the system. The bones are generally, but not always, amongst the last organs to be affected by the venereal poison: hence, Hunter places them amongst the second order of parts affected in constitutional syphilis; and Ricord ranks them amongst his tertiary symptoms, in which, says he, the syphilitic virus is completely transformed. Exposure to cold, whilst suffering from other forms of syphilis, or when using, or after having used, mercury, are considered by many writers as the chief causes of these forms of disease of the bones. These diseases are also much less frequent in hot countries than cold, and in those places where a systematic simple treatment without mercury is followed. They are said to be rare in Sweden, Denmark, Hamburgh, and Vienna, where such treatment is adopted. On the other hand, such diseases of the bones are unknown, except syphilis have existed in the constitution; though they are more frequent, perhaps, when mercury has been given for its cure, if the patient be of bad habit of body, and exposed to cold during its administration. The same remarks will hold good with regard to syphilitic iritis.

Nodes, as they are commonly termed, result from an effusion or deposit between the periosteum and bone, the result of inflammation affecting one or both of these parts. Very commonly they are dependent upon a superficial inflammation of the bone itself. These effusions between the periosteum and bone may consist of serum, pus, or lymph. Again, nodes are produced by an effusion of a proper osseous matter, similar to the provisional callus first thrown out in cases of recent fracture. Some nodes, very likely, are thus formed, since they present the feeling of a true enlargement of the bone itself. This is, most probably, the first effect of the inflammation of the surface of the bone, and the effusion of pus and serum are subsequent, supposing the inflammation to proceed unchecked by remedies.

Nodes may be situated on the sternum, the clavicle, the tibia and fibula, the radius and ulna, and on the bones of the head. Nodes are common on the external surface of the sternum; they have also been described as existing on its inner surface, where the pressure of the node on the organs within the chest has produced severe and alarming symptoms. A presumed case of this kind, coexisting with nodes on the head and on the external portion of the sternum, has been detailed by Dr Owen Daly, in the 'Dublin Hospital Gazette' for March 15, 1857. The symptoms of intra-thoracic pressure disappeared with the node on the head and external surface of the sternum under the use of blue pill and iodide of potassium. Again, effusions within the cranium, or thickening of the membranes of the brain, frequently accompany external cranial nodes.

A gentleman under my care, who had suffered from nodes on the head for some time, which always disappeared under the iodide of potass, but constantly recurred after its omission for a short time, was suddenly seized with giddiness; and this giddiness appeared at the same time with two large nodes, one on the parietal, one on the frontal bone. A blister was applied to the nape of the neck, and calomel and opium with the iodide of potass given. As the nodes disappeared, the giddiness became less, and at length totally disappeared. With the exception of the giddiness, the patient was quite well; no fever or acceleration of pulse, appetite good, bowels regular. I believe that in this case, effusion within the cranium, probably between the dura mater and the bone, corresponded with the appearance of the external nodes. In reference to this point, Virchow says (op. cit., page 50), "I have always found corresponding with syphilitic bony diseases of the external surface of the cranium, pathological changes, modifications more or less important, on the internal or free surface of the dura mater, of a fibrinous or hæmorrhagic character." Some illustrative cases bearing on this subject are related by Dr Todd, in his 'Clinical Lectures on Diseases of the Brain,' Lecture xvii.

CASE XLIII.

Node of the right temporal fossa; two attacks of hemiphlegia; cure by blisters, calomel and opium, with the iodide of potass.

A gentleman was brought to me by a surgeon; the former having had secondary syphilis in a variety of forms, lepra, papulæ, tubercles of the skin, and iritis. When I first saw him, he had intense pain in the head, especially in the right temple, where there existed a large node filling up the right temporal fossa. He had suffered from two attacks of hemiphlegia: first one side was affected, and then the other. He was even then partially paralytic. There could be no doubt of the syphilitic nature of this disease of the brain. I recommended blisters, calomel and opium, with the iodide of potass; under this treatment the patient improved much, but after a long period some slight paralytic symptoms still remained.

Nodes may terminate in a great variety of ways. First, by resolution, *i. e.* by the subsidence of the inflammation of the bone and periosteum which produced them, and the absorption of the fluids or matter effused. In other instances, after the node has disappeared, the surface of the bone remains uneven, depressions exist in it, as though a portion of the bone had been eaten away, which is the case. This either arises from the pressure exercised by the effusion of the fluid between the periosteum and bone having produced absorption, or from the bone having become softened and carious from inflammation of the bony tissue itself. This mode of termination I have often seen exemplified where, after the disappearance of nodes, the surface of the bone has been found destroyed to some considerable extent; this is, no doubt, the mode in which the appearances witnessed frequently in diseased bones are produced. If the node has suppurated, and has either burst of itself or been punctured by a lancet, and the surface of the bone has been exposed, caries commonly follows to some extent, and the soft parts run into ulcers exceedingly difficult and sometimes impossible to heal. Ulcers of this kind, to which every variety of application has been used, at times get nearly well, and then suddenly begin to ulcerate again, having thickened edges, not unlike a primary venereal sore on other parts. In some instances, where osseous matter has been thrown out between the periosteum and bones, such effusion remains permanent; the inflammation accompanying, or dependent upon such state, subsides under proper treatment, but the deposit of osseous matter remains permanent, and produces one form of exostosis.

It is possible that venereal diseases of the bones and periosteum, but more particularly inflammation of the latter, causing effusion between it and the bone, may be mistaken for or confounded with periostitis arising from other causes, and more particularly where these are of rheumatic origin and character. In drawing a differential diagnosis between cases of rheumatic periostitis and venereal periostitis, we shall be guided by the history of the case, and the preceding occurrence of some of those forms of constitutional syphilis which belong to secondary symptoms.

I am not aware either that periostitis, arising from causes not venereal, is complicated or succeeded by those diseases of the bones ending in caries, which we so commonly notice in the disease when it has a venereal origin. I do not think that the symptoms immediately preceding the development of nodes would enable us to form a very certain diagnosis of the nature of the affection; they are both preceded, for some time before the appearance of nodes, by nocturnal pains. The seat of the pains may in some measure guide us. In the rheumatic forms of disease, the pains are situated in the joints or fleshy parts, as the shoulders; in those of venereal origin, the pains are more in the shafts of the long bones, particularly of the radius, ulna, tibia, fibula, and in the bones of the head; in the rheumatic forms they sometimes, but rarely, affect the parts I have mentioned.

The prognosis in venereal diseases of the bones and periosteum is not always favourable. If the health of the patient be unbroken by previous courses of mercury incautiously administered, we may hold out hope of recovery with some degree of certainty; but if the constitution has been impaired by poverty, debauchery, bad living, mercury, and syphilis, all contributing their part to the destruction of the patient, we have a disease to contend with which will sometimes baffle all our treatment, however skilfully it may be framed, and however unweariedly it may be followed out both by practitioner and patient. At any rate, no rash promises must be made as to certain and speedy amendment, since relapses after partial restoration are so frequent.

The treatment of syphilitic diseases of the bones and periosteum must be both constitutional and local. By the former we endeavour to correct the poisoned condition of the system from which the local disease had its origin, and upon which it depends. By the latter we endeavour to remove the local effects which such a condition of the system generally has produced.

Most of the earlier modern writers on syphilis, from Hunter downwards, recommend full mercurial courses for the cure of syphilitic diseases of the bones and periosteum, such as those I have described. Amongst the more prominent of these writers, I may mention Hunter, Bell, and Swediaur. The latter says, "All syphilitic complaints of the bones require a complete mercurial course, continued longer than for the affections of the soft parts; for it is sometimes necessary to continue the use of mercury for three or four months, in order to obtain a radical cure." Bell says (p. 239, vol. ii.), "In every affection of the periosteum and bones arising from the syphilitic virus, mercury should be given immediately, for it is upon this remedy that we chiefly depend." The same opinions will be found reiterated by all modern writers, from Hunter downwards, till the therapeutic effects of the hydriodate of potass attracted attention in certain forms of constitutional syphilis. We find Sir A. Cooper inculcating the same line of practice. Modern surgeons now generally treat consecutive venereal diseases of bones with the preparation of iodine instead of mercury; in fact, it has almost become a therapeutic axiom that the iodide of potassium is the remedy in such cases. To a certain extent this is true. I have, however, been constantly disappointed with the effects of the iodide of potass; cures do take place by the use of the iodide alone in some cases, but these cures are only obtained after long periods and after a series of relapses. I have already mentioned cases of this kind in which the iodide has been taken for years without effecting a cure, when with the addition of small doses of calomel and opium, or the mercurial vapour bath, the disease has permanently yielded after two or three months' treatment. I do not banish the iodide from the treatment of such cases; I recommend the other remedies in addition, when frequent relapses after the use of this remedy take place. "What has been already said by M. Diday on the use of the iodide of potass in osteoscopic pains is also applicable to periostitis, nodes, exostosis, &c., in which I every day see that the iodide of potass exercises but a moderate effect: if we depend on it alone, a cure only takes place after relapses, and is but rarely obtained as decidedly as though mercurials had been used. From the frequent occurrence of such instances at the Hospital of St Ursula, we have been led to the following therapeutic axiom: That the iodide of potass is the best substitute for mercury, but that the latter is the anti-syphilitic remedy *par excellence*, and that it increases the beneficial effect of the iodide of potass if mercury have been administered before it."—Gamberini 'On the Truces of Syphilis,' from 'Dublin Journal,' May, 1854.

Almost all the varieties of venereal nodes are, on their first appearance, tender to the touch; the first effect of the hydriodate is a diminution of this tenderness, then diminution of the node itself, which, in many cases, gradually and entirely disappears under the use of this salt. If, after the continued use either of this medicine or mercury for a reasonable length of time, the node have diminished to a certain point, and then remains hard and stationary, without tenderness, we are to look upon this as effused osseous matter, constituting a true exostosis, which is hardly likely to be removed by a further continuance of medicine, although its dispersion is very frequently obtained at this period by local treatment.

The local treatment of venereal diseases of the bones and periosteum is also of great importance. As many of them are ushered in with symptoms of inflammation more or less acute, an antiphlogistic local treatment, suited to the degree of inflammation present, should be adopted; several relays of leeches should be placed over the node till all tenderness shall have disappeared; these are to be succeeded by blisters, which should be dressed with the stronger mercurial ointment. The continued application of blisters, even after all constitutional treatment appears to have lost its effect, will often succeed in reducing very considerably the size of a venereal node. Many other remedies may be used, with the view of dispersing a node when perfectly chronic, *i. e.* when all symptoms of inflammation have disappeared; amongst these may be mentioned frictions with mercurial ointment and camphor, the hydriodate of potass ointment, the application of the tincture of iodine, or the solution of iodine in the hydriodate of potass, so generally used, and with such signal success; pressure and strapping with the emp. ammoniaci cum hydrargyro, which I have so usefully employed in the same way in affections of the testes which succeed to gonorrhœa. A question of great practical importance remains to be here considered, in reference to the treatment of collections of fluid which succeed to or accompany venereal ostitis and periostitis. If fluctuation be evident in a tumour of this kind, and no redness or thinness of the integument have taken place, I do not think any author imprudent enough to recommend the opening of such an abscess, with a view of discharging its contents: should this be done, we are very likely to produce caries and exfoliation of the bone beneath, the extent and consequence of which it is impossible to foresee. Sir A. Cooper mentions the case of a person who died in consequence of exfoliation produced by the opening of nodes on both his tibiæ. In these cases, we are on no account to lay open these collections of fluid, but by a perseverance in the constitutional method of treatment, and the repeated application of blisters, to endeavour to procure absorption of the fluid effused. Where the existence of pus is rendered still more certain by the redness and shining appearance and thinning of the integument overing the tumour, I cannot follow the advice of Sir A. Cooper, to make an incision down to the bone." I would rather press the importance of the advice given by Mr Colles in reference to this point. "Some," says Mr Colles, "have proposed the early opening of the tumour, and the evacuation of all the contained fluid. To this proposal I would object, that in some cases this particular practice is followed by painful suppuration, and by very copious discharges, and not unfrequently by caries and tedious exfoliation of the bone. It seems preferable in all cases to try the local and constitutional effects of mercury and iodine, and by means of these to endeavour to avert suppuration and ulceration. This rule should be most strictly adhered to in the case of nodes on the forehead, or on any exposed part of the body: for when a node has been of long standing, we often find that a sort of chronic suppuration is established; the integuments become thin and sometimes red; at other times they are reduced to the utmost degree of thinness, and yet may retain their natural colour, so that the surgeon is actually tempted to give vent to the fluid by the puncture of a lancet. Yet if he will but resist the temptation which the very thin state of the skin offers to him to open it, and will still apply repeated blisters, he will have no reason to lament his forbearance; for as soon as the mercury or hydriodate of potass comes to act favourably on the system, he will perceive that the fluid begins to be absorbed, and that this process will finally be terminated by the adhesion of the skin to the surface of the bone. From the depressed position of the skin, after adhesion has taken place, and the sunken unequal surface which the bone presents to the touch, we are convinced that an absorption of the bone has gone on to some depth."[1]

In such cases, it might be well, if much distension present, not to lay the abscess open with a lancet, but to puncture with a very fine trocar. This mode of practice will relieve the distension, and give time for other treatment to be brought to bear; at the same time the puncture will be so small that no air can possibly be admitted, the surface of the bone will not be exposed, and the risk of caries and exfoliation will certainly not be increased.

---

[1] Colles, p. 187.

CHAPTER XXXIII.

ON SYPHILITIC DISEASES OF THE LUNGS.—SYPHILITIC PHTHISIS.—CHLOROSIS.—CACHEXIA.

There can be no doubt that a profound alteration in all the humours and solids of the body takes place in many constitutions in the latter stages of constitutional syphilis: at such periods the body wastes, the appetite is lost, the patients assume a white cadaverous appearance, the strength diminishes, and night-sweats, diarrhœa, and cough set in. If this state continue, uninfluenced by treatment, a fatal termination may take place, of which I have seen some instances.

To this array of symptoms, the term "Syphilitic Phthisis" has been given. The name also of "Syphilitic Chlorosis" has been applied to similar constitutional states due to the same cause. The older writers, particularly Portal, Bell, Lagneau, and others, believed in the existence of a true venereal phthisis. That patients may die of wasting of the body, with cough, and night-sweats, and even spitting of blood, as a consequence of prolonged syphilis, is quite certain; but whether a true "tuberculosis" is ever produced, or even developed by syphilis, is a matter of great doubt. Hunter says, "This disease seldom or ever interferes with other disorders, or runs into or terminates in any other, although it has been very much accused of doing so." The cases recorded by authors of the cure of syphilitic phthisis by courses of mercury, and other modes of anti-venereal treatment, were clearly not cases of "tuberculosis;" for the treatment which is said to have been successful in such states, is clearly the last which would be applicable or beneficial in tuberculosis.[1]

---

[1] The syphilitic virus is probably never converted into tubercle. Mr Ancel ('On Tuberculosis,' p. 391) says, "the only point of view in which

The assemblage of symptoms I have mentioned as constituting what has been termed "syphilitic phthisis," are due to the existence of a syphilitic taint in the system, more particularly affecting the blood and humours of the body, and are not commonly met with apart from some other local and unequivocal symptoms (either present or immediately preceding) of syphilis, such as old secondary ulcers, diseases of the bones, throat, or larynx. It frequently happens that the local disease, or previous history of the patient, is not sufficient to account for the profound cachexia under which the patient labours. Manifestations of constitutional syphilis are frequently met with of a very formidable character, and of long standing, where the general health or constitution of the patient has suffered very little; in other instances, this chlorotic condition is very quickly induced, and appears to arise from a more direct action of the syphilitic poison upon the blood itself; hence the pallid countenance, the thin, weak, frequent pulse, and the muscular weakness.

It will be seen that this state of constitution sometimes comes on very quickly, and therefore is not, in all instances, due to the time a syphilitic taint has been in existence, but to a more immediate action of the poison on the blood, instead of on the skin, bones, or other parts.

If cough or diarrhœa be present, the condition of the patient resembles very much one of phthisis; but auscultation must soon clear up any doubt as to the condition of the lungs themselves.

If such a state of constitution be due to the poison of syphilis alone, it is quite clear that those remedies which will neutralize or eradicate the poison, are the only ones from which the patient is likely to derive permanent benefit, to whatever

---

the doctrine can be held is the absolute transmutation of the syphilitic poison into the tuberculous element of disease."

"There is no fact or experiment which conclusively proves that a single case of tuberculosis was ever produced by syphilis alone. . . . At the same time, syphilis, by its deleterious effects on the constitution of the parent, may probably weaken the reproductive faculty, and lead to the conception of children, who, from poverty of blood and debility of organisation, are predisposed to tuberculosis." (Op. cit., pp. 391, 392.)

state of weakness he may be reduced; and experience bears out the fact of the failure of all remedies except those I have mentioned. I have frequently known patients put on courses of cod-liver oil, and removed to the sea-side, and to other climates, without the slightest benefit; when they have recovered completely and rapidly on being submitted to a methodical and properly-framed anti-syphilitic treatment, more particularly one by the moist mercurial vapour.

There are, however, some forms of constitutional syphilis which resemble very closely consumptive diseases from other causes; and these are syphilitic ulcerations of the windpipe.

CASE XLIV.

A middle-aged female was admitted into the Queen's Hospital, under my care, in June, 1848. She had three years before been treated, as an out-patient, for primary venereal sores, and in the interval had had ulceration of the throat, and some pustules upon the skin, which I did not see. When admitted, she was much emaciated, had profuse night perspirations; expectorated large quantities of purulent matter streaked with blood, had completely lost her voice, and the larynx was enlarged, tender, and painful. I drew the tongue forwards, and passed into the larynx a bent piece of whalebone, armed with sponge, which was soaked in a solution of nitrate of silver, and directed the vapour of one grain of the iodide and a scruple of the bisulphuret of mercury to be directed into the throat every morning. The gums were made very sore after the fourth application, and the remedy was used less frequently. No alteration was made in the treatment, and at the end of six weeks she was discharged in tolerable health, having recovered her voice, though it remained hoarse, and having lost entirely the night-sweats, the cough, and the expectoration.

There could be no doubt as to the nature of this case; it was one of syphilitic ulceration of the larynx: but if the previous history of the patient had been unknown or misstated, there must have been great difficulty in discriminating between such a disease and one of ordinary laryngeal phthisis.

Drs Stokes, Graves, and Munk have spoken of syphilitic diseases of the lungs ; but I have seen no facts recorded which prove the production of a true tuberculosis by syphilis. I have seen no case of the syphilitic tubercle developed and softened in the lungs, and cannot suppose that such cases can be frequent, since amongst the great number of syphilitic patients daily treated at the Queen's Hospital, where every case in my practice is carefully recorded, none have been met with. Should such cases occur, I know of nothing that would enable us to distinguish them from cases of ordinary tuberculosis, except the previous history, and concomitant state of the patient ; since, apart from such considerations, both the rational and physical symptoms of tuberculosis and syphilitic tubercle would most closely resemble each other.

The remedies best suited to the forms of disease I am considering, are the iodide of potassium, iron, the extract of opium, the cold infusion of sarsaparilla in lime-water, sarsaparilla broth, the moist mercurial fume, and residence in a fresh, pure, dry atmosphere.[1]

---

[1] I must here refer the reader to the ninth chapter of Virchow's work, already quoted, 'On Syphilitic Diseases of the Lungs.' I have already recorded several cases of syphilitic disease of the windpipe, about the nature of which there could be no doubt; but there is no certain sign by which we are enabled to pronounce a disease of the lung syphilitic. Whilst admitting this, Virchow says that "he is more than ever inclined to believe in the existence of 'pulmonary syphilis.'"

CHAPTER XXXIV.

ON SYPHILIS AND ITS TREATMENT IN INFANTS, PREGNANT WOMEN, AND NURSES.

THE subject of infantile syphilis is one of grave interest and importance, bearing, as it naturally does, not only on the health and life of the individual concerned, but involving many delicate and serious questions which relate to the mode in which, or from whom, the disease has originated or has been produced. An infant who exhibits symptoms of a syphilitic taint sooner or later after birth derives this from one parent or from both; and hence it becomes a matter of the first importance to determine whence this has proceeded, as it is evident that unless the latent taint be eradicated from the diseased parent, diseased offspring, or the premature birth of a dead child, will, in the event of succeeding pregnancies, probably take place. In examining this most important question, I shall confine myself chiefly to the consideration of facts which I have myself observed, corroborating my opinions by references to well-authenticated cases, selected from authors who have themselves carefully observed, and whose opportunities and talents for observation are well known.

INFLUENCE OF THE FATHER.

I shall first consider the influence of a diseased father in the production of a diseased infant, the mother never having been diseased. I will suppose that the father, at some indefinite period before his marriage, has suffered from well-marked constitutional syphilis, but that for some time previous to that event he has exhibited no signs of disease. He marries a healthy woman, and she gives birth to an infant, which sooner or later after birth—*i. e.*, in the course of the first month or so—shows symptoms of a syphilitic taint. Let me illustrate this by the detail of a few cases.

CASE XLV.

In August, 1852, I treated a patient for a well-marked attack of syphilitic lepra. The symptoms disappeared under the treatment, which was not very protracted, nor was it very regularly followed. In 1854 this patient married a healthy-looking young woman, who in 1855 was prematurely delivered of a dead child. In 1856 she was delivered, at her full time, of an infant, which appeared well and hearty for three weeks. It then began to "snuffle," then had puckering of and a dry eruption about the mouth, and two large vesicles, resembling pemphigus, on the thigh and on the side. The child was treated by mercurial inunction on flannel bandages round the knees, and cured. In this case the father remains without symptoms of syphilis for more than three years, yet the disease breaks out in his offspring. Mark what takes place on the part of the mother in the mean time: a premature birth of a dead infant, and a diseased living child cured by mercurial inunction. The father during this interval has had no symptom of syphilis; the mother never had any in her life; the ova suffer, and doubtless by impregnation with diseased semen.

In this instance, it must be observed, the mother escapes contamination; she contracts no disease, either from a diseased husband or a diseased fœtus. This is, however, not always the case. I adduce this case, of common occurrence, as the type of a class which is frequently met with in practice. There are others, which I shall presently mention, where, during pregnancy, or immediately after delivery, syphilis appears in the mother, without any primary disease ever having existed.

CASE XLVI.

A. B—— was treated by me in the Queen's Hospital for a pustular syphilitic disease of the skin, of a very formidable character. The symptoms disappeared under the treatment employed. Whilst he was in the hospital, his wife brought her infant to me, covered with scaly blotches. The child was plump and apparently healthy when born, but a few weeks afterwards the patches broke out and the health began to decline. The mother had no symptom of disease; her breasts, as well as the infant's mouth, were free from ulceration. She was extremely anxious to be examined, fearing she might be labouring under some disease of the parts themselves. I instituted the most careful examination with the speculum, not only once, but four or five times, and could never discover the least local disease. The child in this instance was alone treated and cured. I purposely abstained from treating the mother, whom I watched for nearly two years. She has never suffered from syphilis in any form.

Many cases have been selected by M. Diday[1] from different authors, which are very similar to those I have just related. They tend generally to show that a father having symptoms of constitutional syphilis at the time of marriage, or at periods more or less remote before it, may procreate a diseased infant, and that the mother may never exhibit any symptoms of disease: "Les mères étaient saines, rien ne faisant présumer qu'elles eussent été infectées."—P. 22.

The explanation of these cases appears to be, that the ovule is impregnated with diseased semen, and its product is consequently diseased. By referring to Dr Tyler Smith's sixth lecture in the 'Lancet' for Feb. 9th, 1856, it will be readily understood how this takes places. It is very common to see symptoms of constitutional syphilis appear many years after the healing and supposed cure of the primary disease, and on the same principle must be explained the procreation of diseased offspring by men who have exhibited no outward mark of syphilis for long periods.

M. Diday puts the question: Will a man who has had syphilis, but exempt at the time of marriage from all symptoms of disease, procreate a syphilitic infant? No positive answer can be given to this; neither can any answer that will apply to all cases. He may do so, but not necessarily. In some cases where the outbreak has been very violent not long before marriage, a healthy child is sometimes born; but this is not always so, as the details of Case XLVI. sufficiently show.[1]

---

[1] 'Traité de la Syphilis des Nouveaux-nés, &c. Par P. Diday.' Paris, 1854.

CASE XLVII.

A. B——, the father of four healthy children, unfortunately contracted chancre, which was followed by a most formidable attack of syphilitic lepra, and a sore throat. I saw this case soon after the constitutional symptoms manifested themselves, and attended to it throughout. The patient was treated by mercurial vapour for three months. After a lapse of two months, he was treated again by the same remedy for two months more. I then believed him well, and consented that he should resume intercourse with his wife. He did so. Since that period three healthy children have been born at their full time. Neither wife nor children have ever had symptoms of disease.

If we compare Cases XLVI. and XLVII., it will be observed that they are very similar in their history. Both had formidable attacks of constitutional syphilis, yet one begets a diseased child, and the other a healthy one. This is to be explained, doubtless, by the fact that one patient was submitted to a prolonged and energetic treatment; whilst the other had been submitted to no treatment before his wife conceived, or to one badly framed and irregularly carried out.

The history of Case XLVII. shows that constitutional syphilis may, by proper treatment, be perfectly and really cured—a fact doubted by many authors of established reputation.

M. Ricord has been made to say, that when one parent only has been diseased, the other transmits to the infant the immunity which such parent enjoys.[2] M. Diday also states, that the cases which he has detailed in reference to the point in question establish, without contradiction, the law that an individual who has suffered from constitutional syphilis may procreate a healthy child, if such influence (*i. e.*, the morbid tendency or syphilitic taint) is corrected during the act of impregnation by that of a healthy individual—*i. e.*, of one exempt from any syphilitic diathesis.[1]

---

[1] In reference to this point, I know the case of a gentleman, who has exhibited unequivocal symptoms of constitutional syphilis for nine years; he has been married five, and his wife has given birth to three healthy children, which, as yet, continue in perfect health. They have never shown the least symptom of syphilis.

[2] M. Prieur, Thèse, 1851, p. 28, quoted from Diday.

Both these theories, for as such they must be looked upon, are most unsatisfactory, and explain nothing; they are of no service in practice, and cannot be referred to in any way as a basis or guide upon which to form an opinion. The facts which clinical experience teaches are these: that any father who has been once affected with constitutional syphilis, although he may have been for some time free from any outward marks of the disease, may, in cohabiting with a healthy female, procreate or beget a diseased child; but the chances are in favour of the infant escaping if the outbreak of disease have been very violent—*i. e.*, if the skin have been loaded with eruption, or the patient have followed a prolonged and energetic treatment, one ingredient of which consists in profuse and periodical sweating.

In all the cases which I have detailed, it will be noticed that the mother has escaped; there has been no syphilis communicated to her; but there is another class of cases in which the mother does not retain this immunity. At a variable period after conception she exhibits well-marked symptoms of syphilis, both in the genitals and in other parts of the body. I will mention a case which I observed and treated that puts this beyond a doubt, where no primary disease existed in the husband at the period of marriage, but where the symptoms of constitutional syphilis were manifest in the wife soon after the commencement of pregnancy.

Case XLVIII.

C. K—— married a healthy lady, having had no symptom of syphilis of any kind for a year previous to his marriage. Shortly after marriage his wife became pregnant, and the husband again suffered from copper-coloured blotches on the skin; he had ulcers in the throat, and lost his hair and eyebrows. The wife was prematurely delivered in the fifth month of her pregnancy of a dead child. She had about this time copper-coloured blotches like her husband, a sore throat, and lost her hair and eyebrows. In this case, and I dwell especially on the fact, no sexual mischief existed. The wife was carefully examined: she had never suffered from ulceration or discharge of any kind; the vagina and mouth and neck of the uterus appeared totally free from disease.

---

[1] Diday, op. cit., p. 55.

The organs of generation do not always escape; they are, indeed, very commonly affected, but with symptoms very different from those of a primary disease. Again, a proof that the mother derives the disease in such cases from her fœtus is to be found in the fact that the symptoms of syphilis, as far as the mother is concerned, very frequently disappear after abortion or delivery, even without treatment; and should she become pregnant again by a man who has never been diseased, she brings forth healthy children. A very remarkable case in support of this view, of the contamination of the mother by means of the fœtus in utero, is given by Dr Balfour.[1]

CASE XLIX.

"A respectable young woman, from the North, was married to a tradesman, who had no trace of syphilitic disease at the time of marriage; but he afterwards acknowledged that, two years before, he had disease, followed by slight secondary symptoms, which had entirely disappeared under medical treatment, and he had seen or felt nothing since. This woman complained of nothing until about three months after she became pregnant; then, however, symptoms of secondary syphilis became apparent; spots of psoriasis appeared on various parts of the body; hard knots were felt in the perinæum and on the external labia, and within the vagina was a hard, knotty feeling all over the mucous surface. Her child exhibited a distinctly syphilitic appearance, which was removed by treatment. Shortly after delivery, all symptoms of syphilis entirely disappeared, and as she shortly afterwards went into the country, she was subjected to no medical treatment. A few months afterwards her husband died. She subsequently married a farmer. About six or eight months since I saw her, and she has borne three thildren to her second husband, and certainly more healthy children could not be seen. She informed Dr Balfour she had never been under medical treatment since he attended her, and had had no medical man near her, except at the period of her confinements; she at the same time stated that she had never suffered, during any of her pregnancies, from anything like what she had done during the first one."

---

[1] 'Edinburgh Medical Journal.'

The two last-quoted cases prove very strongly the position, that a mother, healthy at the time of marriage, and becoming pregnant by a man with latent constitutional syphilis, becomes herself diseased through the medium of the fœtus. Hence, Dr Montgomery has said, "A woman so married to a man who has latent constitutional syphilis, by which she is infected, will show no symptom of the contamination until she conceives or perhaps miscarries, and then the taint is manifested by the development of secondary symptoms in the course of a few weeks, as if the infection was at first communicated and confined to the product of the ovary, and the general system became thence contaminated."

This is, doubtless, the true explanation of the matter, and one which, I think, must be generally admitted. Mr Jonathan Hutchinson laid before the Hunterian Society, in October, 1856, a table of fifty cases in which he believed the mother to have been thus contaminated. In a correspondence with me on the subject of this communication, Mr Hutchinson says, "In the discussion yesterday evening, Drs Oldham and Lever both expressed themselves as very positive as to the not infrequent occurrence of the transmission, by men at the time in apparently perfect health, of constitutional syphilis to their wives. They hold, in common with many others, that the contagion is effected by the seminal fluid, and not by the fœtus, and maintain that they have met with women who have so received the disease without ever having conceived. In an inquiry which has extended over many years, Mr Hutchinson states that he has met with but one instance of this, and here believes that an abortion at an early period had been overlooked. Mr Hutchinson also states that Mr Paget had been equally unsuccessful in finding a case in which constitutional syphilis had been contracted by a woman without either primary syphilis or pregnancy having preceded it.

The opinions of the late Mr Colles on this subject are well known;[1] and Professor Porter, of Dublin, has lately[2] detailed several cases which seem to prove that syphilis may be communicated by the husband, apparently free from the symptoms of syphilis, to the wife, without the intervention of pregnancy or primary disease; these opinions agree with those of Drs Oldham, Lever, and others, just alluded to. I mention one case that I personally observed and treated, about which there can be little doubt.

CASE L.

In January, 1853, J. K—— consulted me for secondary syphilis, characterised by a scaly eruption, and sores; where the crusts and scales had fallen off, large, foul ulcers had succeeded; he had also a sore throat, and ulcers on the soft palate, and red, indurated spots on the centre of the tongue. Six months previous to the commencement of these symptoms, the patient had suffered from primary sores.

In May, J. K—— married, no symptom of syphilis being then evident. In September his wife came to me; she had then hard, solid lumps on the labia, thickening of the labia majora and minora, which were red, and internally covered with a white adhesive mucus; the irritation was intense. On the skin of the thighs there were a number of circular, red spots; and copper-coloured, scaly blotches existed in various parts of the body. She had never been pregnant.

INFLUENCE OF THE MOTHER.

In the cases just recorded, I have endeavoured to illustrate the influence of a diseased father upon his offspring, the mother remaining healthy. In some instances I am about to bring forward, I shall show that there are certain circumstances under which the mother may be the source of the disease, the father remaining healthy, never having been diseased.

---

[1] 'On the Venereal Disease,' chap. xiii.

[2] 'Dublin Quarterly Journal,' May, 1857.

The mother may be the source of disease to her fœtus, or infant, in four ways:

1. She may be diseased before conception.
2. She may become diseased after she has conceived.
3. She may disease her infant in its passage through the vagina or external parts; a source of infection formerly supposed to be very common, but in reality very rare.
4. She may disease it after birth.

The first mode of infection has been commonly called hereditary, the second congenital, and the two last acquired. It is not always easy, or even possible, to point out the separate or distinct influence of each parent in the production of a diseased child; but the cases I have adduced in reference to the father, I think, must be convincing, and I am about to detail two others, which, on the part of the mother, will in all probability be found equally so.

Case LI.

A. C——, a very healthy woman, married to a healthy man, a tradesman, gave birth to four healthy children during the first seven years of her marriage, all now living. Whilst nursing her fifth child, she had occasion to send for a woman to draw her breasts. Soon after this, she perceived ulcers about the nipples; to these succeeded copper-coloured blotches, spread pretty extensively over the body, and a sore throat: the child she was nursing dwindled away and died. The next three children were born dead; two others soon after birth had eruptions on the skin, and wasted away and died. The disease on the part of the mother was not suspected, nor was she, during the time I have mentioned, treated. Her husband during all this time remained in the best health. After the death of the fifth child, she consulted me about ulcers on the legs, which were due to the detachment of the crusts covering some of the blotches I have just mentioned. I examined her carefully. She was then suffering from a distinctly and well-marked syphilitic lepra, the symptoms of which disappeared under a treatment by mercurial vapour. In this case, the separate influence of the mother is well shown. We observe a healthy father, a healthy mother, four healthy children; then the breast diseased by a suck-pap, followed by an eruption of marked character, a sore throat, and the child then sucking, wasting, and dying; and subsequently three children born dead, and two dying of wasting of the body, preceded by eruptions on the skin; all this time the father having no symptom of disease. A similar series of phenomena might follow if a diseased child were placed with a healthy wet-nurse. If the nurse became again pregnant, she might probably give birth to a diseased child. I quote a case from M. Cazenave to illustrate this.

Case LII.

A wet-nurse, previously healthy, received an infant to suckle, which, fifteen days after birth, had blotches on the vulva and ulcers on the mouth. It died at the age of three months. Soon after the death of this infant, the nurse perceived tubercles on the genitals. Six months after she was delivered of a daughter, which, at its birth, appeared healthy, but soon afterwards had condylomata of the vulva and perinæum, and an eruption on the thighs.

The mode of infection, and the influence of the mother, is precisely the same in this case as in the last, although it is not as remarkable, neither is its history so defined and clear. I shall adduce one other instance before leaving this part of my subject.

Case LIII.

A healthy man married a very healthy woman. I knew them both. At the usual period, and at her full time, she was delivered of a remarkably fine boy. All went on well for three weeks, when the breasts became troublesome, and a suck-pap of confessedly indifferent character was employed. Soon after this an ulcer formed near the nipple, which was difficult to heal, but at length got well under the use of blackwash. Soon after this the patient became covered with an eruption, which I saw: it was a syphilitic roseola. The infant had a similar eruption, and then a large sore near the anus. The mother also had a very sore mouth, and ulcers on the tongue. The symptoms disappeared under treatment. The patient became again pregnant. She aborted, or was rather prematurely delivered of a dead child, in the seventh month of pregnancy. She became pregnant a second time, and was again prematurely delivered in the seventh month of a dead infant. During the whole of this period the father remains perfectly healthy, and has never suffered from syphilis.

I could cite many more cases of a similar character from my own practice, and that of others; but those which have been already given are sufficient to show the occasional separate and single influence of the mother in the procreation of syphilitic offspring. What length of time the taint may remain in the mother, if not properly treated, it is difficult to say: I am of opinion, for long periods, as Case LI. shows. I have very little faith in syphilis, in such instances, wearing itself out.

It will be observed, that the influence of the mother in the production or communication of disease to her offspring is different in the cases I have just recorded. In the first instance, she is healthy, and gives birth to a healthy child; she then becomes diseased, and communicates such disease to the sucking infant. This is what I have described as acquired syphilis; and the prospect of cure by judicious treatment is much greater than in the second case, where the mother remaining uncured, again conceives and gives birth to a diseased child. Here the disease becomes hereditary. The parent diseased before conception gives birth to a diseased child, which is then formed and developed in the womb of a tainted mother.

In the first case the infant may generally be cured; in the second, if the child is born alive, the prospect of cure is uncertain and improbable. Hence M. Lagneau has said, "Infants conceived and developed in the womb of a female suffering from constitutional syphilis seldom live beyond the period of the first dentition; if they survive this period, their health is generally delicate and precarious, in spite of the most rational treatment that can be adopted."—'Syphilis de la Femme Enceinte,' p. 283; Paris, 1817.

It will be observed that, in the cases I have hitherto mentioned, the infant is diseased in three different ways; and I think a different prognosis attaches to each mode of origin. In the first case, the father impregnates the ovule with diseased semen, constitutional syphilis in him being either latent or manifest: but the product of the ovule, the fœtus, is nourished and developed in the womb of a healthy female. In such case, if a diseased child be born, a reasonable hope of cure may be entertained, and such hope is commonly fulfilled.

In the second case, where the mother and father are both healthy, and the former becomes diseased after birth, and communicates such disease to her offspring in the way already described, the infant may generally be cured.

In the third case, where the infant is conceived and developed in the womb of a mother diseased before conception, the prognosis is, as I have already stated, most unfavourable.

When, at the time of conception, both parents are labouring under well-marked constitutional syphilis, there is no chance of a healthy child being born. Of course, the nature and previous duration of the disease in the parents would much modify the condition of the health of their offspring; but I cannot conceive it possible that an infant should, under such care, be born and continue healthy: neither is there much probability of treatment eradicating the taint in the infant so diseased. I have shown, in many of the cases just detailed, that a diseased father frequently begets a diseased child, without the mother exhibiting any symptoms of disease: in reference to this fact, the late Mr Colles observed, "that a child born of a mother who is without any obvious venereal symptoms, and which, without being exposed to any fresh infection subsequent to its birth, shows this disease when a few weeks old,—this child will infect the most healthy nurse, whether she suckle it, or merely handle and dress it; and yet this child is never known to infect its own mother, even though she suckle it, whilst it has venereal ulcers of the lip and tongue!"[1] In this case, the mother is precisely in the same condition as a female labouring under secondary syphilis, who cannot be inoculated with matter taken from her own sores.

Syphilitic diseases in infants are either primary or constitutional; the latter by far the most common. In the former instance, the child must be inoculated during its passage through the vagina of the mother, she labouring at the time under primary sores, or it must be inoculated after birth. If a female, not constitutionally affected, at the time of her delivery be labouring under a primary venereal disease, it is not impossible that such disease may be communicated to the infant during its birth, and thus a primary disease be produced in the offspring. These cases are, however, rare, and persons of the greatest experience, amongst whom may be mentioned M. Gibert, have hesitated to determine whether the ulcers or discharges with which some new-born infants, born of parents labouring under primary venereal diseases, are affected, are due to a primary infection, or to a constitutional taint contracted "in utero." Bertin, to whom we have already alluded, has, however, recorded many cases of children born of women labouring under primary symptoms, and not evidently constitutionally diseased, who have presented, shortly after birth, ulcers, buboes, or discharges which had all the characters of primary venereal diseases, and were, in all probability, due to infection during the progress of labour. I have never witnessed a case of this kind; I have seen eighteen or twenty cases where accoucheurs have contracted the most marked forms of chancre, from attending women labouring under primary sores at the period of their delivery, but I never heard that such women had diseased their infants.[1]

---

[1] 'On the Venereal Disease and the Use of Mercury,' p. 304.

Primary venereal diseases in the infant produced by disease in the passages of the mother are, at least, rare diseases. Drs Maunsell and Evanson state ('Diseases of Children,' p. 351, ed. 4), that they do not remember a case of this nature. I have seen the most marked form of indurated chancre, with indolent buboes in each groin and a leprous eruption, in very young children. A little boy, aged about three, was brought to the Queen's Hospital labouring under a well-marked syphilitic lepra. On stripping him, I found an indurated chancre on the prepuce, and indolent buboes in each groin. This was difficult to explain; but, on diligent inquiry, it was found that his sister, aged about eighteen, had been recently admitted into the hospital under my care with chancre and an eruption: before her admission, her brother was in the habit of sleeping with her.

---

[1] I do not include here purulent ophthalmia and vaginal discharges, sometimes contracted during labour; the mother in such cases suffering from gonorrhœa, or secondary syphilitic discharges from the uterus.

There are numerous accidental circumstances, doubtless, under which an infant may be inoculated with a primary sore. M. Diday has collected several curious histories of this kind. M. Ricord, in his 'Letters on Syphilis,' mentions cases which he observed, in which Jewish children received the infection, and contracted chancres on the prepuce, which had been divided in circumcision, and then sucked, to prevent hæmorrhage, by an operator in whose mouth primary sores existed. Another form of disease must be considered primary on the part of the infant. A child is born healthy, mother and father both healthy; the mother cannot suckle her child; it is placed out to nurse, or a nurse is hired for it: soon after this, it is observed that the child is diseased, has ulcers in the mouth, and other marks of ill-health. On examining the nurse, she is found to have ulceration of a suspicious character about the nipples, which may or may not coexist with other well-known symptoms of constitutional syphilis: here a constitutional ulcer has been communicated, not a primary chancre, but still the disease is primary as far as the child is concerned. In reference to this point, M. Diday remarks that, "In the immense number of cases in which the disease has been communicated by the nurse to the child, it has very rarely happened that the constitutional sore on the nipple of the former has been the result of syphilis contracted in the usual way, after the development of a primary chancre on her own person: it has almost always been the consequence of the contact of the breast with the mouth of another infected child."[1] M. Cullerier has laid down some rules as a diagnostic guide in these cases, which are worthy of attention. 1st. If the breasts of the nurse and the mouth of the infant are only and at the same time diseased, the question is one of doubt in which the disease originated. 2nd. If the breasts alone are diseased, and the infant has symptoms in other parts besides the mouth, it is very probable that the latter has been the first infected. 3rd. If the infant has the mouth alone diseased, and the nurse has other symptoms besides those on the breast, it is most probable the infant has been diseased by the nurse. 4th. If the nurse has general constitutional symptoms, and the infant only local symptoms, the disease probably originates with the nurse. 5th. If the infant has general constitutional symptoms, the disease is most likely hereditary.

---

[1] Diday 'On Infantile Syphilis,' Sydenham Society's edit., p. 40.

The symptoms of a congenital or hereditary syphilitic taint consist in eruptions on the skin, of an erythematous, pustular, or vesicular character; ulcerations of mucous membranes, on the tongue, the vicinity of the anus, or inside of the lips and mouth; a characteristic snuffling, and a peculiar hoarse cry. These local symptoms are manifested in conjunction with varied conditions of the general health of the child: sometimes it looks well and fat; at other times it is shrivelled, thin, and weak, with a peculiar aspect, looking like a little old man or woman. Affections of the bones and periosteum are rare, though I have seen them occasionally. Pemphigas or large bullæ, appearing in infants soon after birth, have been considered by Dubois as pathognomonic of syphilis: this has been admitted by others. When, however, the bullæ of pemphigas appear in new-born children associated with other symptoms, there can be no doubt as to their nature. A child, four months old, was admitted into the Queen's Hospital in March, 1856, under the care of Dr Heslop. The child was illegitimate, reported to have been born healthy, but exhibited symptoms of disease soon after having been put out to nurse: the symptoms were snuffling, puckered mouth, a crustaceous eruption round the lips; large crusts on the head, which were due to the rupture of large vesicles: the skin-disease was a well-marked pemphigas: the child had also a node on the head. A peculiar snuffling, as though the infant had a bad cold and could not breathe through the nose, is one of the most common symptoms of infantile syphilis: I believe this depends on a pure syphilitic inflammation, with ulceration of the mucous membrane covering the spongy bones of the nose; which ulceration extends to the bones themselves, which become carious and exfoliate. A young lady, aged 16, was brought to me, suffering from a most offensive discharge from her nose, accompanied by the coming away of large crusts having the shape of the spongy bones: these were occasionally mixed with small pieces of bone. The father had been badly diseased before marriage: this patient had an eruption when she was three weeks old, with snuffling and discharge from the nose; at a month old, the ossa nasi sank in nearly to the face. The discharge of pus, and crusts, and bits of bone, had continued ever since. The iodide of potass had been taken for years without any effect; mercury internally had failed. I succeeded in curing the discharge, and apparently the disease, by mercurial inunction to the axillæ, injections of chloride of zinc into the nostrils, and the local mercurial fume.

This characteristic snuffling is one of the most marked symptoms of infantile syphilis: "the puckered mouth, the position of a characteristic eruption round the lips and anus, in addition to the peculiar and fissured appearance of the surface from which the scales have faded, will seldom, if ever, fail to convert a suspicion of the disease into a positive certainty. Condylomatous excrescences from the margin of the anus have never, in any of the cases, accompanied the earliest development of the syphilitic affection, but were always secondary, being observed in those children only whose primary affection was neglected or incompletely eradicated. When the eruption occurring on the nates and face, in the first few weeks of life, had been promptly treated, no condylomata appeared on the anal margin, at least so long as the children were kept in sight. But, on the contrary, when the eruptions were neglected, condylomata were the almost certain results."[1]

Occasionally infants at the moment of birth present the symptoms of syphilis, and, in addition to such symptoms, are shrivelled and emaciated, the skin hanging in folds in different parts of the body. It more frequently happens that these symptoms are not manifested till many days, weeks, or even months after birth. More commonly disease shows itself from the third to the sixth week: it may be however earlier, more frequently later. "In the majority of infants confided to my care, the disease has not appeared till the first, second, or third month, and frequently much later."[2] "The two physicians who had preceded me," continues this writer, "have, with me, observed that infants born of infected parents have not persented the symptoms of syphilis till many months after birth, and sometimes not till they were weaned, and that up to this period they had appeared in the best health."[1] The records of the Venereal Hospitals "du Midi" and "Vaugirard" have shown that some infants born of diseased parents have never had symptoms of syphilis. In some instances these were the offspring of parents who had undergone treatment during pregnancy; or they were recently affected. In a second class, much smaller, the parents had never been treated, and yet the infants, watched for upwards of a year, had never shown any symptoms of venereal taint. I have already alluded to several cases, personally observed and noted, in which the father has been diseased before marriage, and even continued diseased after marriage, and yet healthy children have been born, and these children have continued healthy for years. The case is different on the part of the mother.[2]

---

[1] Dr Golding Bird, 'Guy's Hospital Reports,' April, 1845.

[2] Bertin, op. cit., p. 97.

---

[1] M. Diday has collected 158 cases in which the date of the first outbreak of the symptoms of syphilis was noted. In these cases the disease appeared—

Before the completion of the first month after birth,	in 86 cases.
Before the completion of the second - -	in 45 „
Before the completion of the third - -	in 15 „
At four months - - - -	in 7 „
At five months - - - -	in 1 „
At six months - - - -	in 1 „
At eight months - - - -	in 1 „
At one year - - - -	in 1 „
At two years - - - -	in 1 „

[2] Infants conceived and developed in the womb of a female suffering from constitutional syphilis seldom live beyond the period of the first dentition; if they survive this period, their health is generally delicate and precarious, in spite of the most rational treatment to which they may be submitted. See Lagneau, Ex-Chirurgien de l'Hôpital Vénérien, 'Syphilis de la Femme Enceinte,' Paris, 1812, p. 283. See also Professor Paul Dubois' paper on the subject in the 'Annales de la Syphilis,' p. 78, 'Syphilis considered as one of the possible Causes of the Death of the Fœtus;' also the same paper, in the 'Gazette Médicale,' Août, 1850. The learned professor comes to the following conclusions: 1. That the presence of pus, either diffused or circumscribed in the thymus gland of new-born infants who have died with other symptoms of a syphilitic taint, is not to be considered as a coincidence, but as a pathognomonic symptom of syphilis. 2. That such a pathological condition, in the absence of any other evidence of the cause of the death of the fœtus, fully warrants a specific treatment of the parents, as the only means of averting a repetition of the same results. A pregnant woman may exhibit symptoms of syphilis for the first time

When a child is born diseased, many questions of the highest importance suggest themselves at once in reference to points of treatment. There can be no doubt as to the propriety and necessity of submitting the infant at once to treatment in the manner subsequently recommended; but we must go further than this, and in order to prevent a repetition of the birth of a diseased child in the event of further pregnancies, it will become necessary to submit one or both of the parents also to treatment; for the very fact of the condition of the child becomes a demonstrative proof that taint must exist in one of them. It may happen that neither of the parents has exhibited any syphilitic symptoms for years, and it is very probable that the mother has never exhibited any symptoms at all. If it can be ascertained that the father ever had constitutional syphilis, there can be no question for a moment about submitting him again to a thorough and proper treatment, and of a different kind to that he has previously undergone; if the mother has also exhibited any symptoms, both must be treated.

We must not pronounce the mother free from syphilis till the vagina and os uteri have been carefully examined. (See the

---

during pregnancy, and this may arise from a primary disease being contracted after she became pregnant, or she may exhibit constitutional symptoms only, the disease being communicated to her by the fœtus in utero. In either case she should be submitted to treatment; but this treatment of the mother does not always prevent a diseased child being born, although it may remove the symptoms of syphilis from the mother.

CASE.

Mrs R. was admitted under my care into the Queen's Hospital, in the fifth month of her pregnancy, with well-marked indurations in each of the labia, and a characteristic syphilitic lepra: her health otherwise good. She was treated by mercurial frictions, under the influence of which the syphilitic symptoms entirely disappeared. She was delivered at her full time of a diseased child.

Two precisely analogous cases are recorded by Diday (op. cit., p. 215). Both women were treated during pregnancy, and the symptoms of syphilis disappeared; they had both diseased children, who infected healthy nurses. In these instances it will be remarked that specific treatment cured the mother, but did not prevent or cure the disease in the child. Probably the treatment was commenced too late, or not persevered in long enough.

chapter on 'Syphilis of the Uterus.') If the mother be found free from disease, and has never exhibited symptoms of disease, it is not imperative she should be treated; but in the event of her giving birth to a second diseased child, which I have known happen under such circumstances, it becomes necessary to submit her to treatment, in order to prevent a repetition of the same misfortune. I have known six diseased children born, and the mother has never had a trace of disease, locally or constitutionally.

CASE LIV.

A gentleman married, after having been free from all symptoms of syphilis for some years. His lady aborted of her first child, and of her second: the cause was not suspected. The third child was born alive, but at six weeks old had snuffling, iritis, and condylomata round the anus: it was cured by mercurial frictions. The lady aborted of her fourth child; the fifth and sixth had syphilitic symptoms. The mother never had any symptoms of syphilis: she was repeatedly and carefully examined. She was submitted to a full course of treatment by frictions and the mercurial vapour bath, and had a healthy child; but she brought forth diseased children before this, although the father had been twice treated.

Some have supposed that a mercurial course predisposed a pregnant female to miscarriage. This, however, is incorrect. Bertin has stated (op. cit., p. 169), that pregnant females with constitutional syphilis much less frequently miscarry when they are submitted to an appropriate treatment, than they do if the treatment be postponed till after delivery. The disease is here more to be dreaded than the treatment. If the treatment be adopted and conducted cautiously, there is very little to dread, either on the part of the female or the fœtus. The mother is very likely to be cured, and a healthy child born. If it be neglected, premature labour, with death or formidable disease in the child, are almost certain. For confirmed constitutional syphilis, or well-marked primary sores occurring in pregnant women, a modified treatment, the effects of which are to be carefully watched, is to be adopted, and persevered in till the symptoms have yielded. If mercury be used, the remedies best suited to these forms are frictions of small quantities of mercurial ointment, either upon the thighs or in the axillæ, with the mercurial vapour bath. These remedies are much safer and more certain than internal mercurial remedies. In the advanced periods of pregnancy, I would limit the general treatment to frictions only. The remedies must be suited to the form and variety of the disease with which we have to contend, according to the rules already laid down. A plan of treatment must be framed to suit the particular circumstances of the case, whether the disease be in the throat, bones, or skin, and the nature of the eruption, whether pustular, tubercular, or scaly.

It is certainly the correct practice to submit a pregnant woman affected with syphilis to an immediate and direct specific treatment. All experienced modern writers are agreed on this point. M. Vidal says, "When I directed the department of the nurses at the Lourcine Hospital, I treated syphilitic pregnant women in the same way as those which are not diseased." The same view is supported by Dr Egan.

"Observation has taught me," says Bertin, "that diseased pregnant women more frequently miscarry when they have not been submitted to any treatment, than when they have been treated during pregnancy; and that when this event happens during the course of treatment, it depends commonly either upon the disease itself, badly treated, or treated too late, upon the state of cachexia or weakness to which the patient has been reduced by her disease, or upon the excesses she has committed during her pregnancy." The result of modern experience shows that a pregnant female constitutionally diseased may be treated with safety, and with a strong probability of cure both to herself, and possibly the eradication and prevention of disease in the fœtus in utero.

It is not prudent to commence the full treatment of a pregnant female during the ninth month of her pregnancy. At this period a palliative treatment only should be adopted; if a mercurial one, it should consist in frictions with small quantities of mercurial ointment every two or three days, leaving the full treatment to be commenced a month after delivery.

If a female contract primary sores during pregnancy, two things are to be feared: constitutional infection, both in herself and infant, and the contamination of the infant during parturition—a circumstance, though rare, sometimes happening. If the primary disease occur during the earlier months or middle of pregnancy, the female is to be fully treated, observing the cautions already laid down in reference to treatments during pregnancy, whether mercurial or not. Mercurial inunction is here also the best mode we can adopt, if mercury be indicated.[1]

When a female is affected with primary ulcers on the genitals near the time of parturition, they must be destroyed by some appropriate caustic, to protect the infant from infection on the one hand, and the accoucheur or midwife on the other. I have seen many constitutions irreparably broken in medical men by syphilis, contracted from attending a female during parturition, with syphilitic affections of the vagina or os uteri.

When the symptoms of syphilis are first manifested in infants, treatment should be at once commenced, at whatever age these symptoms first appear. The treatment of syphilis in infants may be either direct or indirect: the patient may either take medicines by the mouth, or have them applied to the skin; or these may be given to the nurse who suckles the child, and the child thus influenced through the medium of the milk. Formerly it was the practice to shave the back of an animal, such as an ass or a goat, and rub into the animal a daily dose of mercurial ointment, the child being fed on the milk thus medicated. The latter treatment, full of inconvenience in its practice and uncertainty in its result, is now altogether abandoned; although Swediaur positively states that in a reigning family in Europe, *i. e.* in his day, "no child survived a certain age until this treatment was adopted." Indirect treatments by means of the medicated milk of the nurse, however, are not altogether abandoned. "Bassereau mentions the case of a child affected with subcutaneous tubercles, manifestly tertiary, contracted from its father, who had reached the same phase of the evolution of the disease. Notwithstanding the gravity of the symptoms, the child recovered under the use of the iodide of potassium taken by the nurse. A most conclusive counterproof adds great value to this case. Four years later, the same man, still under the influence of the diathesis, begot another child: the latter was equally affected with syphilitic tubercles. This time, the nurse having refused to take the iodide, the child was subjected to mercurial inunctions; but it sank. Ricord and Bassereau speak of another new-born child, the subject of deeply-seated tubercles, which recovered by the use of iodide of potassium given to the nurse; but in this case mercurial inunction had at the same time been practised on the child, so that mercury may claim a part at least of the honour of the cure."[1]

---

[1] "Je pense, comme quelques praticiens, que le traitement par les frictions mercurielles est celui qu'il convient le plus généralement d'employer dans la syphilis primitive des femmes grosses."—Baumès, 'Précis Théorique et Pratique sur les Maladies Vénériennes;' Lyon, 1840.

The treatment of the infant will depend very much on the character of the symptoms of the disease; and in affections of the bones or glands, or deep-seated tubercles of the skin, the iodide of potassium may be given either through the medium of the nurse or mother, or directly to the child. Nevertheless, in the cure of infantile syphilis the iodides play but a very secondary part, and our chief dependance is to be placed on mercury given by the mouth, or used endermically. The hydrargyrum c. cretâ, and calomel, are almost the only mercurial preparations that can with safety be administered internally to infants with a syphilitic taint. I have seen cases recover under the use of both these remedies; but I think they would more quickly, and with much less trouble, by the endermic method.

The best plan of treating infantile syphilis is that by frictions with mercurial ointment, in the way recommended by Sir B. Brodie.[2] "I have provided a flannel roller, on one end of which I have spread some mercurial ointment, say a drachm or more; and I have the roller, thus prepared, applied, not very tight, round the knee, repeating the application daily. The motions of the child produce the necessary friction, and the cuticle being thin, the mercury enters the system. This causes neither griping nor purging; in a child it does not even, in general, cause soreness of the gums; but it cures the disease. Very few children ultimately recover, in whom mercury has been given internally; but I have not seen a single case in which this other method of treatment has failed." The ointment may be rubbed on the soles of the feet, and woollen socks worn; this answers very well: or a small quantity of the ointment may be smeared on the axilla, and worked in by the motion of the arms. I have also wrought several very good cures by dusting calomel more or less over the body of the child: it does not salivate or purge, or produce any inconvenience; but it very frequently speedily and safely removes the symptoms of syphilis. Infants are not so liable to relapse after the disappearance of the symptoms of constitutional syphilis as adults: cures in them are commonly sound and permanent.

---

[1] Diday, op. cit., p. 250, Sydenham Society's edition.

[2] 'On the Administration of Mercury in cases of Syphilis,' in 'Lectures on Pathology and Surgery,' p. 248.

CHAPTER XXXV.

OF THE EMPLOYMENT OF PARTICULAR REMEDIES IN THE TREATMENT OF CONSTITUTIONAL SYPHILIS.

THE MERCURIAL VAPOUR BATH.

THE patient is placed on a chair, and covered with an oilcloth lined with flannel, which is supported by a proper framework. Under the chair are placed a copper bath, containing from half a pint to a pint of water, and a tinned iron plate, on which is put from one to three drachms of the bisulphuret of mercury, or the same quantity of the grey oxide, or the binoxide, or other mercurial preparation: under each of these, a spirit-lamp. The patient is thus exposed to the influence of three agents, heated air, common steam, and the vapour of mercury, which is thus applied to the whole surface of the body in a moist state. After the patient has remained in the bath from five to ten minutes, perspiration generally commences, and by the end of twenty or thirty minutes, beyond which I do not prolong the bath, it is generally very free. The lamps are now removed, and the temperature gradually allowed to sink; when the patient has become moderately cool, the coverings are removed, and the body rubbed dry; he is then suffered to repose in an armchair for a short time, during which he drinks a cup of warm decoction of guiacum or sarsaparilla.

The apparatus requires some modification and arrangement to suit particular cases. Where it is wanted to induce a quick and decided action, the whole power of the bath should be brought into operation, and the largest quantity of mercury should be employed. In rapidly-spreading ulcers, this is required. Again, in chronic skin or throat diseases, where a powerful action would rather oppress the patient than cure his disease, the power of the bath should be modified, and not so great a heat or so much mercury employed. This is accomplished by using smaller spirit-lamps, or, when perspiration has once been induced, by the removal of one lamp, leaving the patient thus exposed for a time to the mercurial vapour alone. This should be done where the patient has been broken down by long-continued disease, in bad or weak subjects, or where a more prolonged action is required to eradicate the more deep-seated effects of the venereal poison, as in diseases of the bones, or indurations on the penis. Each particular case would require a greater or less modification of this kind. The form of mercurial employed is also of consequence. In skin diseases, the bisulphuret is to be preferred; in diseases of the throat or nose, the grey oxide, binoxide, or calomel is better, because the patient can bear the head immersed without sneezing or coughing, which he cannot do when the bisulphuret is used.

I am in the habit of using four mercurial preparations for the bath—the bisulphuret of mercury, the binoxide of mercury, the grey or black oxide, and the iodide: to this list, Mr Henry Lee has lately added the chloride of mercury. These may be used singly, or combined in different ways, to suit the peculiarities or emergencies of each particular case. The first three preparations are milder than the last, and from half a drachm to four drachms may be used with perfect safety. In one case half an ounce was used for each bath, and two applications were sufficient to bring the system fully under the influence of the remedy. The iodide must be used in smaller quantities; nearly the whole of this preparation is rapidly converted into vapour, and, unlike all the other preparations, leaves scarcely any ash behind it. From five grains to half a drachm of the iodide is sufficient, and it is better to use it in small quantities, mixed with a larger quantity of either of the other preparations. When calomel is used in ordinary cases, from ten to twenty grains may be employed for each bath. In affections of the testes (sarcocele) and of the bones (the various forms of ostitis or periostitis), a combination of a scruple of the iodide, and one or two drachms of the bisulphuret or binoxide, would be a proper form. For local application to the cavities of the nose or mouth, calomel or the grey oxide of mercury are the best preparations. I have known the vapour of the biniodide of mercury used. A surgeon, by mistake, employed the biniodide instead of the iodide, in a most formidable case of secondary syphilitic ulceration. It produced violent diarrhœa with bloody stools, but it cured the disease. I have never used this salt by way of fumigation, on account of its irritating properties.

A short preparatory treatment should be adopted before using the baths. The bowels should be kept free, and the use of wine, spirits, &c., prohibited. The patient should be free from fever, the tongue clean, and the freedom from organic diseases, such as those of the heart and lungs, more particularly, should be ascertained. Should such or other complications be present, they might require modifications of treatment, but would not prevent its employ, as this is not only the most certain, but the safest way of curing most forms of constitutional syphilis.

This plan of treatment does not commonly require that the patient should forego his ordinary occupations of business, or that he should be confined to the house during its use. It must be admitted that its effects would be accelerated by confinement to bed, or to a couch in a moderately warm room; but this is by no means imperative, and I have very rarely advised it, except in such cases where exposure or exercise would be positively mischievous, as in the cases of sloughing, or rapidly-spreading ulcers in the throat or elsewhere.

The diet should be light, nutritious, and unstimulating: milk, chocolate or cocoa, night and morning; animal food for dinner, with weak wine-and-water. Where the patient has been reduced by mercury given internally, or by a combination of syphilis and mercury, the diet may be more nutritious; but stimulants should be avoided. Smoking must be prohibited, particularly in diseases of the throat and nose.

In a great majority of cases the moist mercurial vapour, employed as I have directed, is capable of curing the disease without the assistance of internal medicine; but the cure is generally expedited and rendered more certain by the administration of the latter in small quantities. It may be very advantageously combined with frictions of small quantities of the stronger mercurial ointment. (See the chapter 'On Mercurial Treatment.') The treatment is always assisted by the decoction of sarsaparilla or guaiacum, drank warm night and morning, and immediately after leaving the bath. I prefer the latter, the compound decoction, made according to the formula of the Edinburgh Pharmacopœia. Where other medicines are required to assist the treatment, and I allude particularly to the various preparations of mercury, it is surprising how small a quantity is required when the patient is using the vapour. I have known several instances where diseases which have been rebellious to large quantities of mercury, given for long periods, yield immediately the baths were employed. The effects of mercury upon the system become very quickly manifest under the influence of the baths, when the system had previously resisted this influence. (I allude to the effects of mercury on the disease, not to its sensible effect on the mouth.) When I employ mercury internally, during the use of the baths, it is either under the form of the biniodide or bichloride, given in solution in small quantities, not exceeding the twentieth of a grain for a dose. The use of this medicine in drachm doses of the ointment in form of friction, in five grains of blue pill or calomel, two or three times a day, under the old plan of treating venereal diseases by mercury, can never be required, except it is wished to break up the health and constitution of the patient. How many have never recovered from internal mercurial treatments of this kind! I never saw the most delicate patient, either male or female, whose health was injured under the plan I recommend, and I have very rarely seen a disease that has not been cured. The experience derived from the treatment of many thousand cases warrants me in speaking thus positively on the subject.

The time occupied in the cure of venereal diseases by the mercurial vapour bath is vastly less than that consumed by any other kind of treatment; its effects are commonly immediate, one full bath very frequently making at once an impression on the disease. Where the hair has been falling rapidly, one bath has arrested this; ulcers which have been rapidly spreading have been rendered stationary by one bath. After two or three baths, the improvement is in most instances marked; and the cure is effected in one-fourth, or even one-sixth, of the time required for the success of ordinary treatments. The nature of the cases determines the time occupied in the cure. In superficial skin diseases, or superficial ulcers of the nose and throat, the cure is very rapid. I have constantly known affections of this kind entirely cured in a fortnight or three weeks, with pleasure rather than inconvenience to the patients.

In enlargements of the bones and testes, in indurations of the penis, persistent induration of the cicatrix of a primary sore, the cure is necessarily more tedious; the change of structure produced in such diseases must have time for removal: nevertheless, in these cases, which require months of treatment, under common circumstances, and which are not unfrequently considered or given up as incurable, the moist mercurial vapour will do more in a month than any other treatment in six. I have known cases of induration of the penis removed in three or four weeks, which have not shown the slightest disposition to amendment after months of ordinary internal treatment.

The effects of the mercurial vapour bath upon the patient vary under different circumstances. If the general health of the patient be apparently good, and we have to control a single isolated symptom of disease, such as a primary sore, an enlarged testis, or an indurated cicatrix, and the baths be used too frequently, the patient would become a little languid, and probably a little thinner; this would be avoided by properly timing the intervals between the baths. Should the patient be labouring under general constitutional taint, and exhibit as local symptoms loss of hair, sore throat, ulcers of the nose, or skin diseases, he almost invariably gets fat under the treatment. The mouth is commonly affected, after using four or six baths, more quickly if the head be immersed, which is better; some patients can bear the head in the bath for five, ten, or even twenty minutes without inconvenience; patients vary in this particular; and it depends very much on the form of mercurial employed. The gums, when affected, are red, elevated, and tender; but the baths very rarely produce salivation.

Some forms of constitutional syphilitic diseases more readily yield to the use of the vapour than others. Some are cured with an extraordinary degree of rapidity, and are perfectly cured, which is proved by their not having relapsed, or presented a fresh venereal symptom after many years. These forms are superficial diseases of the skin, loss of hair, superficial ulcerations of the nose and throat. Some varieties require a longer treatment, as diseases of the deeper-seated parts of the skin, some forms of ulceration, diseases of the testicles and of the bones.

To most forms of constitutional syphilitic disease, the treatment by vapour is applicable, and beyond all doubt the most speedy, certain, and safe remedy that can be employed; yet there are some forms of disease which yield with greater rapidity than others. That which gives way with the greatest difficulty is the induration which succeeds to the healing of a primary sore. I do not mean that soft fulness which is sometimes found in such situations, but that specific induration which is met with under the skin, and which is sure, sooner or later, to end in local or constitutional mischief. I have seen cases which have resisted all modes of treatment but the baths; to these they yield but slowly, but they do yield, after other plans of treatment have been followed for months without success, or with but partial amendment.

One or two objections have been raised to this plan of treatment by reviewers. These are easily answered, and would never have been made had those gentlemen been familiar with its practical working. The chief objection which has been raised is that it is unmanageable, and the quantity of mercury introduced into the system cannot be regulated, and that rapid and severe salivation might occur. For more than twenty years I have administered or superintended the administration of this bath, from four to six times every day, and I have never seen one case where such an effect has been produced. I have employed it in many thousand cases.

The analogy has been made with the dry fume, which sometimes has produced such an effect: the mixture and dilution of the vapours of mercury with common steam, and the sweating induced by the bath, entirely removes any fear of this kind, and I would stake my reputation that with proper management it cannot occur.

I must not be understood to say that I consider or recommend the mercurial vapour bath as a specific remedy in all forms of constitutional syphilis, but I repeat that it is the most powerful therapeutic agent in the removal of disease, and the least harmful to the constitution of the patient, of any remedy with which I am acquainted; neither am I so prejudiced in favour of this remedy as to reject the assistance of all others, which, as we shall presently see, when associated with it, under certain circumstances, produce the best effects, but which effects, I am bound to say, would not, under many circumstances, occur without the assistance of the vapour, since in numerous instances these remedies have failed in curing the disease when used alone. The profuse sweating induced by the bath prevents the accumulation of either iodine or mercury in the system, and thus contributes materially to the preservation of the constitution of the patient.[1]

THE CHLORIDE OF MERCURY.

Calomel may be administered internally, as an anti-syphilitic, united to opium, conium, or soap. Apart from its internal exhibition, however, it has various uses in the treatment of syphilis. Mixed with lime-water in various proportions, it forms a wash or lotion, exceedingly useful in dressing many primary and secondary venereal ulcers. Employed by way of friction on the gums and tongue, calomel has sometimes a marked effect in curing chronic secondary syphilitic ulcerations of the throat, fauces, and tongue. When cured in this way, the saliva which flows during the process of friction should not be swallowed; the mouth should be washed out with cold water before and after the operation. This mode, I believe, originated with Clare.[1] It was also highly spoken of by Swediaur and others. It had, however, as far as I know, totally fallen into disuse till I lately revived it. I could narrate a great many successful cases treated in this way, not only of the throat and adjacent parts, but of other forms of constitutional syphilis.[2] Calomel is also useful dusted over various secondary syphilitic affections of the

---

[1] "Another method of employing mercury is by a combination of fumigation with steam, constituting what Mr Langston Parker, of Birmingham, terms the 'mercurial vapour bath.' I can testify, from considerable experience, to the beneficial effect of this method of mercurialization, having effected some very extraordinary cures with it after all other modes of treatment had failed. I recollect in particular the case of a young gentleman, of Arkansas, who was under my charge, in 1855, on account of tertiary syphilis of many years' standing, accompanied by an enormous amount of rupial action of the skin, one of the sores being fully as large as a dinner-plate, and with an infirm, cachectic state of the system, who was promptly cured, comparatively speaking, with the bisulphuret of mercury, conjoined with the frequent use of tepid baths and a nutritious diet, after a great variety of other means had been fruitlessly employed. My opinion is that this method of treatment is not sufficiently appreciated; it certainly deserves the highest encomiums."—S. D. Gross, 'System of Surgery,' vol. i., p. 505.

---

[1] 'A New Method of Curing the Lues Venerea, &c.;' London, 1779.

[2] Cases, showing the effects of calomel frictions:—

A. T., Queen's Hospital, a girl about 20 years of age, admitted with lichen, covering the face, back, and limbs; also bad ulceration of the tonsils. Treated in various ways, with varying benefit; at times she was better, and then relapsed. The ulceration of the throat remained after the other symptoms had disappeared. This is common in syphilis; one symptom will remain and prove obstinate and rebellious to the treatment which has cured the other. The ulceration of the throat quickly and permanently disappeared by rubbing three grains of calomel on the tongue, gums, and inside of the cheeks, night and morning. Mercurial vapour was not used.

CASE.

M. S. had indurated chancre, succeeded by lepra and ulceration of the tonsils; the lepra chiefly affected the hands with thick, hard scales. The case was very obstinate; the mercurial vapour bath was used with benefit; but whatever plan of treatment was adopted never succeeded in removing both the symptoms in the throat and on the hands; one symptom only yielded. A permanent cure was at length obtained by rubbing three grains of calomel twice a day on the tongue, and on the inside of the cheeks and gums. No salivation was produced, although the remedy was used for a month.

CASE.

J. M., æt. 28; constitutional syphilis for two years. All the symptoms had disappeared, except superficial aphthous patches on the fauces, tonsils, uvula, and roof of the mouth, which had rendered the mucous membrane of these parts thick and uneven. The parts surrounding the ulcers were red; if the patient drank or smoked, the parts became inflamed and painful. Various remedies employed without success; they had absolutely no effect on the throat, which seemed the same after all other symptoms had disappeared for twelve months. A perfect and permanent cure was obtained in six weeks by calomel frictions. No salivation or stomatitis was produced.

skin, especially secondary condylomata. Made into an ointment with lard, it is most useful as a dressing to secondary ulcers, or employed by way of friction in scaly diseases of the skin.

℞ Adipis ppt., ℥j;
Hyd. chloridi, ʒj. M.

Mixed with tannic acid or powdered acacia, in various proportions, it may be blown into the throat or nasal fossæ in cases of secondary ulcerations of these parts. I have practised this in the Queen's Hospital and in private practice frequently. After the failure of other means, M. Biett has used it in this way, with complete and prompt success.

℞ Hyd. chloridi, gr. ij—v;
Pulv. acaciæ, gr. v.
M. ft. pulvis ter die utend.

M. Biett has carried the insufflation of calomel to the extent of fifteen or twenty grains a day. Some very remarkable and good cures were thus obtained. All modes of administering calomel are open to the objection of occasionally producing salivation.

THE BICHLORIDE OF MERCURY.

The bichloride of mercury is a valuable remedy in the treatment of many forms of constitutional syphilis, particularly of those varieties which are complicated with ulcerations of the mucous surfaces. According to Dzondi, whose method of treating syphilis is extensively followed in Germany, and at La Charité Hospital of Berlin, the bichloride of mercury is the chief preparation of this remedy on which reliance should be placed in the treatment of constitutional syphilis. This was a favourite remedy of Dupuytren's, who gave it in small doses in the form of pills.

℞ Hydr. bichloridi, gr. ij;
Pulv. opii, gr. viij;
Pulv. guaiaci, gr. xxxii.
M. ft. pil. xvj; j ter die.

Dzondi's pills each contain one-twentieth of a grain of the bichloride, united with a small quantity of opium. He administered, in the commencement, four a day, half an hour after the dinner meal. Twelve grains of the bichloride are made with an inert powder, as liquorice, into 238 pills. Four of these pills are given the first day; the day but one after, six; increasing the dose two pills every day, and leaving one day's interval between each dose, so that, on the thirtieth day from the commencement, the patient takes thirty pills, or one grain and a half of the salt.

The bichloride of mercury is much better administered in solution. I so exhibit it, with some decoction of the woods, either of guaiacum or sarsaparilla. From twenty drops to a drachm or more of the liquor hydrargyri bichloridi may be given in a tumblerful of one of these decoctions, twice or thrice a day, with the best effect. United with bark and hydrochloric acid, it is also exceedingly useful in the advanced stages of constitutional syphilis in debilitated habits.

Mixed with lime-water, in the proportions of from four to eight grains to the half-pint, it forms a useful application to many secondary venereal ulcers. I exclude from consideration the method of Cirillo, which consists in using the bichloride mixed with lard, by way of friction, on the soles of the feet. By Continental surgeons, the bichloride is used to produce the ordinary effects of mercury in primary syphilis, to which, in my opinion, it is little suited.

THE IODIDE OF MERCURY.

The iodide and biniodide of mercury were first introduced into the therapeutics of syphilis by Biett of St Louis, and since largely employed in that hospital by his successor, M. Cazenave. They are most valuable remedies in the treatment of many forms of constitutional syphilis, and I have for years employed them both, but more especially the biniodide, with almost uniform success. Many surgeons who have employed it associate it with opium; but Biett and Cazenave state that its combination with opium destroys its curative properties, although its efficacy is increased by treating the patient with daily doses of opium for a few days before the use of the iodide is commenced; it is useful also to omit the remedy for a day, every three, and give a full dose of opium. The iodide of mercury must be administered in the form of a pill combined with lactucarium, in doses of from one to three grains.

℞ Hydr. iodidi, gr. x;
Lactucarii, ℈ij. M. ft. pil. xx.

From one to four pills a day (Cazenave). A very good way of administering the iodide has been suggested by Dr Neligan, to substitute it for the calomel in Plummer's pill.

℞ Hydr. iodidi,
Antim. oxysulphuret., āā ℥ij;
Guaicaci in pulv.,
Sacchari fæcis, āā ʒiv. M.

The iodide of mercury is indicated in pustular and tubercular diseases of the skin, in diseases of the bones and testes; in secondary venereal ulcerations, where the constitution has long suffered protracted and varied treatments, and still the disease remains. It frequently cures after the failure of other remedies; its employ should be associated with a nourishing, but not stimulating diet, decoctions of the woods, and the mercurial vapour bath. The iodide is an uncertain remedy, producing commonly griping pains, in however small a dose it may be given. M. Ricord employs it by giving one grain every evening, after the last meal. When the dose is to be increased, one is to be taken in the morning, and one in the evening. It is chiefly indicated in constitutional, not in primary syphilis.

THE BINIODIDE OF MERCURY.

I prefer the biniodide of mercury to the iodide; I find it agree well with the gastric condition of the patient, which the iodide frequently does not. It is more manageable, and can be given in solution, a great advantage. I employ it in solution with the iodide of potassium, a combination which I have been in the habit of prescribing in the Queen's Hospital for years.

℞ Hydr. bionididi, gr. iij;
Potass. iodidi, ʒj—iij;
Sp. vini, ʒj;
Syrup. zinzib., ʒiij;
Aquæ dest., ℥jss. M.

Twenty or thirty drops three times a day, in half a tumbler of some decoction of the woods. M. Puch, of the Hôpital du Midi, employs a form somewhat similar. This remedy is indicated in the same cases as the iodide. Used in small doses, with the mercurial vapour bath, it produces excellent cures.

THE BICYANIDE OF MERCURY.

The bicyanide of mercury is frequently employed in secondary syphilis, and for the following reasons:—It is soluble and not liable to decomposition, acts quickly, and does not occasion those pains in the stomach and bowels that so frequently accompany the prolonged administration of some other preparations. According to the researches of M. Parent-du-Châtelet,[1] the bicyanide of mercury is not decomposed by either acids or alkalies, nor by decoctions containing azotized principles or gallic acid.

The bicyanide of mercury may be administered internally in pills, or in solution, and used externally in form of pomade or ointment. Externally, it is an extremely useful application to various forms of herpes, particularly that form termed by Alibert "herpes squamosus," the violent itching and irritation of which it allays. It may be employed externally also as a dressing to indolent syphilitic ulcers and schirrous tubercles, or as a gargle in ulcerations of the throat. The dose of the bicyanide is from one-sixteenth of a grain to a grain.

GARGLE OF THE BICYANIDE OF MERCURY.

℞ Hydrargyri bicyanidi, gr. x;
Infus. lini comp. ℔j. M.

SOLUTION OF THE BICYANIDE OF MERCURY.

℞ Hydrargyri bicyanidi, gr. vj ad gr. x;
Aquæ, ℔j. M.

---

[1] 'Revue Médicale,' Août, 1832.

Half an ounce for a dose, administered in a sudorific decoction of the woods, night and morning.

PILLS OF THE BICYANIDE OF MERCURY.

℞ Hydrargyri bicyanidi, gr. xxiv;
Ammoniæ hydrochloratis, ʒiij;
Guaiaci gummi, ℥iij;
Ext. aconiti, ʒiij;
Ol. anisi, ♏xxiv.
M. mucilaginis, q. s. ft. pil. 400.

One or two twice or three times a day, the dose gradually increased. Each pill contains about one-sixteenth of a grain of the bicyanide. These pills are a substitute for the bichloride of mercury in many forms of secondary syphilis. M. Desmartis, of Bordeaux, says that the cyanuret (bicyanide) of mercury is superior to all the other preparations of this metal in the cure of constitutional syphilis. He has seen it restore to health patients whose cases seemed hopeless. He has found it efficacious in cases where the patients had suffered for long periods from pains, for which no cause could be discovered. It is indicated in syphilitic diseases of the nose and fauces. I have had some experience in the use of the bicyanide. It does not purge or gripe. A patient requested me to prescribe for him a mercurial that would not purge him; he had a scaly eruption always benefited by mercury, but he could not continue the remedy long enough to cure him, as it always produced diarrhœa in any form that he had hitherto taken it. I prescribed the bicyanide, under the use of which the eruption disappeared without the usual ill effects accompanying the administration of the other preparations of mercury.

THE IODIDE OF POTASSIUM.

Iodine and its preparations, more particularly the iodide of potassium, are employed largely in the treatment of all forms of syphilis. Desruelles has recorded several cases of the cure of primary sores with the iodide. Hanck and Kluge have, on the contrary, given the results of four hundred cases of primary syphilis in which the iodide of potassium had little or no effect. M. Payan has related some cases of indurated chancre, and primary sores with bubo, which yielded to treatment by the iodide. My own experience is against the use of the iodide in primary syphilis, except in some cases of phagedena, in bad habits of body, where I have seen it useful. M. Payan lays it down as a principle, that the efficacy of the iodide of potassium is in direct ratio with the long standing of disease; and hence many surgeons have been led to regard this remedy as almost specific in tertiary symptoms, such as nodes, tubercles, affections of the testes, pains in the bones, caries, and certain forms of secondary ulcerations. M. Ricord regards the iodide of potassium as a prophylactic against tertiary symptoms, when secondary symptoms have disappeared under the use of mercury.

It is certainly in the class of cases just alluded to that the iodide of potassium is most useful, and under many circumstances works remarkable cures. The iodide of potassium, as I have already said, is not to be depended on in the treatment of primary sores; neither is it generally indicated in the earlier stages of secondary eruptions in healthy subjects, nor in the confirmed or chronic stages of scaly or papular diseases of the skin. In such complaints, antimonials, or the bichloride or biniodide of mercury in small doses, in decoctions of the woods, are infinitely more certain and effectual.

In pustular and tubercular skin disease, or in the secondary forms of ulceration which succeed to these, more especially if mercury have failed in their treatment, or the patient be weak and debilitated, or over forty years of age, the iodide of potassium is a most valuable therapeutic agent.

There are, however, many cases of this nature in which the iodide rather suspends than cures disease; and its prolonged use disposes to wasting of the body, and under some circumstances utterly destroys the digestive powers. I have known cases where it has been taken respectively for three, five, nine, and ten years; and in these cases the symptoms have returned when the iodide has been discontinued. A case will be found in the next chapter, of a surgeon, who took three daily doses for ten years, and yet his disease remained. Whilst he took the iodide, the symptoms were kept under; but when he omitted it, they always returned. Pains in the bones are very apt to return directly the iodide is given up. Such cases are not singular; they are exceedingly frequent. I have in the chapter 'On Diseases of the Bones' recorded several cases of this nature. Dr Neligan says, "Iodine and its preparations should not be trusted to alone with the intention of producing a specific action in the treatment of the secondary eruptions; their combination with mercurials is of especial service, but, unless thus prescribed, they usually disappoint. In scrofulous habits their administration should never be omitted, but still a mercurial must be given with them. The administration of the iodide of potassium is attended with the best results, as soon as the preparation of mercury which has been given evidences its action on the system by the mouth being affected."[1]

The iodide of potassium cannot be taken by some patients: in many it produces swelling of the tongue, and salivation; in others, puffing and swelling of the face, and a stiffness of the muscles of mastication. I do not think it produces wasting of the glandular organs, such as the testes and mammæ. I have elsewhere ('Provincial Medical and Surgical Journal') recorded several cases of the prolonged use of the iodide where the testes, &c., were unaffected.

The iodide of potassium may be administered in doses of three to twenty grains three times a day, in distilled water, or some sudorific decoction, as sarsaparilla, saponaria, &c. By some surgeons its use has been carried much farther, and several cases have been recorded where the iodide of potassium has succeeded in large doses where it has failed in smaller ones. M. Vidal mentions a case of ulceration of the tongue, where the iodide had been taken for six months to the extent of twelve grains a day without benefit, which healed in thirty days where the patient took for the first few days thirty-six grains a day, and afterwards seventy-two grains a day. In small doses the iodide is tonic, and as such may be employed as a prophylactic of a further outbreak, when given after a mercurial course which has been employed for the cure of secondary symptoms, and which have disappeared under such treatment. The iodide should then be given in small doses, five or eight grains three times a day, in some sudorific decoction, for some time.

---

[1] 'On Diseases of the Skin,' p. 398.

When, again, secondary symptoms do not yield to mercury, or only partially yield, or where the remedy appears to benefit for a time and then loses its effect, its use should be given up, and the iodine taken for some weeks in small doses; the mercurial course should then be resumed, with another form of mercurial remedy, and it will be commonly found that the symptoms very quickly yield.

It is in large doses, rarely less than from ten grains to a scruple, that the iodide of potassium acts as a direct antisyphilitic. The iodide of potassium should not be given with a mercurial, except in the forms of the salts of iodine and mercury. The mercurial should be administered some hours before the iodide: thus, the mercury may be given at night, and the iodide of potass in the day; or, if two daily doses of a mercurial are requisite, the iodide should be given about four hours afterwards. "The mercury enters the blood, and accomplishes what it can: it is then ready to be removed; and this process, effected usually by the salts of the blood, especially the chloride of sodium, is hastened, as shown by Melsens, by the iodide of potass. In this way salivation is prevented, and the action of the mercury accelerated."—'British and Foreign Medico-Chirurgical Review,' April, 1854.

IODIDE OF SODIUM.

The iodide of sodium has lately been recommended as a substitute for the iodide of potassium by Dr Gamberini, of the Hospital of Saint Orsola, Bologna.[1] The following are the conclusions made by Dr Gamberini:

1. The taste of the iodide of sodium is much less disagreeable than the iodide of potassium.
2. It is much less likely to occasion iodism.
3. It is better borne than the iodide of potassium; and in consequence of this its dose can be almost daily increased, and it thus becomes a more efficient remedy.
4. It has succeeded where the iodide of potassium has failed.

---

[1] See 'Dublin Quarterly Journal,' Nov. 28, 1852.

5. We may commence with doses of a scruple a day; two drachms a day have been taken without the slightest inconvenience.

6. The iodide of sodium is admirably suited to cases in which the corresponding salt of potassium is indicated.

7. The iodide of sodium is the best substitute for mercury.[1]

IODIDE OF IRON.

The iodide of iron may be employed with or without the iodide of potassium, in many of the advanced stages of constitutional syphilis. The cases best suited to its exhibition are those of syphilitic cachexia, or chlorosis, complicated with old ulcers or diseases of the bones, in a strumous habit of body. Administered alone, the iodide of iron rarely, if ever, cures constitutional syphilis; but it may be prescribed with great advantage combined with the iodides of potass, sodium, or ammonium, after a mercurial, in many forms of constitutional syphilis, in weak habits of body.

℞ Syrup. ferri iodidi, ʒvj—℥j;
Potass. iodidi, ℈j—ʒjss;
Decoct. sarsæ concent., ad ℥viij. M.

---

[1] I have used the iodide of sodium largely. It has been successful in those cases where the iodide of potassium might also have been beneficial, such as nocturnal pains, diseases of the bones, and the ulcerating forms of tubercle. In one case of syphilitic tubercle of the tongue, its effects were very speedy and marked. It may advantageously replace the iodide of potassium in many cases where the latter cannot be borne, as it does not produce swelling of the tongue, discharge from the nose or eyes, pains in the muscles of the face, or any pustular eruption, so common under the use of the iodide of potassium. It is well known that some patients cannot take the iodide of potassium where it is strongly indicated, and here the iodide of sodium will prove useful; it is also exceedingly probable that it may cure where the iodide of potassium has failed. The iodide of sodium cured a case of secondary phagedena of the throat very quickly, where the iodide of potassium could not be borne, on account of the large pustular blotches it brought out. On the whole, my experience in the use of this salt has been such as to warrant my recommending it as a very valuable addition to the remedies at present employed in the treatment of constitutional syphilis, and it is exceedingly probable that many cases will occur where it may find its special application.

I have employed the iodide of sodium as an anti-syphilitic in doses of fifteen grains three times a day.

IODIDE OF AMMONIUM.

The iodide of ammonium is a yellow salt, and may be used in the same cases as the iodides of sodium and potassium. As the result of several trials made by Dr Gamberini, of Bologna, it is stated—"1. That the iodide of ammonium is suited to all cases in which the iodides of potassium and sodium are employed. 2. It leads to a rapid cure. 3. The quantity daily given may be varied from half a drachm to half an ounce; intolerance is rarely exhibited. 4. Employed by way of friction with olive oil, it causes the disappearance of osteoscopic pains. 5. The symptoms of intolerance are a sense of burning pain in the throat, and heat in the stomach; these rapidly disappear on the suspension of the remedy for a couple of days. 6. Under the use of this medicine, indurations consecutive to hard chancres have disappeared, also the indurated ganglionic pleiades in the groin. (?) 7. Arthralgias and rheumatoid affections, periostoses, enlarged glands, and papulo-vesicular syphilida, are the forms of constitutional syphilis which have yielded to this drug." —'Bulletin de Thérapeutique,' vol. lvii., p. 365, and 'Medical Times and Gazette,' Nov. 29, 1859.

SUDORIFICS, VEGETABLE DECOCTIONS, AND INFUSIONS.

The various vegetable decoctions and infusions have been long, and are still, employed in the treatment of secondary and constitutional syphilis. To some of these a specific action has been attributed, whereas others must be looked upon as auxiliary remedies merely, whose action is comparatively feeble. Of themselves, it may, I think, be said that they never cure alone; occasionally some symptoms disappear under their use, but generally return when this remedy is omitted. In many forms of skin disease these decoctions of the woods are useful; as auxiliaries, they certainly assist the action of other remedies, and I always prescribe them with this view during the time a patient is using the mercurial vapour bath.

The remedies which are chiefly useful in this way are sarsaparilla, guaiacum, burdock, water-dock, saponaria, sassafras, dulcamara, mezereon, and elm-bark. I generally recommend the compound decoction of sarsaparilla, made according to the form of the London Pharmacopœia, or what I think better, the compound decoction of guaiacum of the Dublin and Edinburgh Colleges, to be taken with the bichloride or biniodide of mercury, or the iodide of potassium. The saponaria is a favourite remedy with many Continental surgeons, who seem to place much faith in it as an auxiliary remedy. Mr Whitehead speaks highly of the *Rumex hydrolapathum* (water-dock) in the secondary, or rather the tertiary forms of syphilis. Mr Whitehead says its virtues as an anti-syphilitic cannot be too highly extolled. The only part recommended for use is the root. Most of these remedies may be employed in form of decoction, in the proportions of about an ounce to a pint. All these decoctions should be prepared fresh every two or three days.

In Germany especially, an empirical treatment by the decoction of Zittman is said to be very frequently successful; it is associated with aperients, rest in bed, and a most rigid diet. It is, as Mr E. Wilson truly says, a compound of sweating, starving, and purging. I have seen several German patients who have been treated by this plan, and their diseases not cured. It reduces the patients to an extreme degree of weakness, and requires confinement to bed during the course.

ZITTMAN'S DECOCTION.

℞ Rad. sarsaparillæ, ℥xij;
  Aquæ, ℔ xxiv.
Boil for two hours, and add—
  Aluminis sulph, ℥jss;
  Hydrarg. chlorid., ℥ss;
  Antimonii oxysulphuret., ʒj.
Boil down to two-thirds, and add—
  Fol. sennæ, ℥iij;
  Rad. glycirrhizæ, ℥jss;
  Sem. anisi, ℥ss.
Infuse for an hour, and strain.

This is termed the stronger decoction. The weaker one is to be prepared by taking the residue which remains after straining the stronger, and adding

℞ Rad. sarsaparillæ, ℥ij;
  Aquæ fontanæ, ℔ xxiv.
Boil for two hours, and add—
  Corticis canellæ,
  Corticis limonum,
  Semin. cardamomi, āā ʒiij.
Infuse for an hour, and strain.

The patient is directed to take half a pint of the stronger decoction the first thing in the morning, warm, and to remain in bed some time after taking it. During the day he should take at intervals a pint of the weaker decoction, and in the evening a second half-pint of the stronger. The last two doses are to be taken cold. Every fifth day the decoctions are to be omitted, and an aperient taken.

In some anomalous forms of scaly venereal diseases of the skin, arsenic has been recommended: alone, it is rarely if ever successful in pure syphilis; with the iodide of potass or mercury, it is sometimes useful. In Donovan's solution, the arsenic is combined with both remedies.[1] I have found this remedy uncertain, sometimes inert, at others too active.

OPIUM.

Opium has, by a number of authorities, both ancient and modern, been extolled as a remedy of great value in the treatment of many forms of syphilis, and by many surgeons the dose has been carried to the extent of twenty or even thirty grains in the day. The cases in which opium is indicated, and in which I have employed it with success, are those of constitutional syphilis where the health has been broken by protracted disease and the use of mercury, when the nights are bad, and the patient emaciated and feeble; where a general irritability, the result of disease and mercury, prevails, and appears to be wearing the patient out.

In exostoses, periostoses, local pains, and secondary ulcerations, occurring in constitutions and in persons thus circumstanced, opium in large doses sometimes acts magically. I have employed it also with marked success in secondary ulcerations of the throat which have remained after mercury had been a long time used, and the ulcers still remained rebellious to every plan of treatment. In protracted ptyalism, resisting local treatment, it is also very efficacious. In all these instances opium appears to subdue a certain constitutional irritability which keeps up the disease, and upon which the disease appears to depend more than upon any specific cause. It is surprising what large doses of the drug patients in this state will sometimes bear without producing constipation or headache. I have rarely given more than four or five grains a day; but I have no doubt the dose, as recorded experience has already proved, might be carried much further without any risk, should the circumstances of the case require it. In summing up the history of the remedies employed in constitutional syphilis, Cazenave says, "We have yet another mode of treatment to recommend, by whose agency we have seen the most formidable symptoms yield, the most inveterate ulcerations healed, and the most durable cures produced, when all other remedies have failed. We speak of the aqueous extract of opium, a precious remedy, even in the most profound cachexia."[1]

---

[1] Liquor arsenici et hydrargyri hydriodatis, Ph. D.

M. Rodet has given the following rules for the exhibition of opium in cases of syphilis:—"1. That the opium combined with mercury in the treatment of bad chancres acts as a powerful auxiliary. 2. That it cures ulcers of this description which have not yielded to mercury. 3. That it may ameliorate, but not cure, such ulcers when given alone and without having been preceded by mercury. 4. That it is well suited for allaying the inflammation which complicates syphilitic accidents."—'Med. Times and Gazette,' Aug. 16, 1859, from 'Bulletin de Thérapeutique,' vol. xlix.

I have used opium very successfully in obstinate syphilitic sores, both primary and secondary. A girl, aged 26, had a large phagedenic chancre occupying a great portion of the perineum, running close up to the anus; the ulcer was as large as a cheese-plate. It continued to spread for weeks in spite of various treatments, when I placed her under the use of opium, the dose of which was carried to eight grains a day. No particular disturbance was produced by it, except constipation; the bowels were not evacuated for a fortnight, and I recommended her to do with as little food as possible. In three weeks the ulcer was soundly healed. I never saw a more successful or a more remarkable case.—A gentleman had a phagedenic sore surrounding the orifice of the urethra, and occupying the glans penis; he also suffered from ague. The ulcer healed by the use of opium alone, after the failure of many other remedies. I mention also another case, of a man who had a creeping phagedenic ulcer of the body of the penis. When I saw it, it had existed a year. Mercury, iodine, and other remedies had failed; but it healed in a few weeks by persevering in the use of large doses of opium. I had used the opium very largely in the treatment of syphilis before the appearance of M. Rodet's paper.

---

[1] 'Traité des Syphilides, &c.,' Paris, 1843.

CHAPTER XXXVI.

CLINICAL OBSERVATIONS ON THE TREATMENT OF SECONDARY CONSTITUTIONAL AND CONFIRMED SYPHILIS, BY THE MERCURIAL VAPOUR BATH, AND OTHER REMEDIES.

CASE LV.

Various forms of constitutional syphilis for five years; failure of various remedies; rapid cure by mercurial vapour.

A PHYSICIAN contracted, in the year 1845, a sore at the orifice of the urethra, which was followed by two buboes, which did not suppurate freely; the patient's health was very much impaired by this disease, and his constitution had been previously debilitated by hard work, and an attack of typhus fever. In August, 1849, he had ulceration of the throat; in three weeks the palate was destroyed to a considerable extent. After the ulceration had healed, an artificial palate was applied; shortly after this the ulceration again appeared, and has not again healed. In November, 1850, this gentleman placed himself under my care, and at that period he was in the following state:

A sloughy, foul, phagedenic ulcer occupied the left tonsil, the whole of the pharynx, and the back part of the roof of the mouth. In addition, there was a general faint copper-coloured mottling of the skin generally, a large scaly blotch on the chest, and a large pustulo-cutaneous spot on the back; on the legs, the cicatrices of what appeared to have been secondary ulcers, succeeding to pustules, or tubercles. The health was much impaired, the weakness great, nights bad, severe pain in the throat, and a fetid discharge from the nose.

The patient used the mercurial vapour bath every other day; was directed to take the cold infusion of sarsaparilla with lime-water, with half a grain of the hydrochlorate of morphia at bedtime, and to wash out the throat frequently with a weak kreasote gargle. The diet to consist of wine and water, fresh animal food, cocoa, and milk.

The seventh bath was administered on November 20th. The copper-coloured mottling of the skin was all gone, the pustulo-crustaceous spot on the back shrivelled up into a hard crust, without an ulcer underneath. All the ulcers in the throat and pharynx rapidly healing; the general health, appetite, and strength much improved; nights good, gums sore, no salivation. This gentleman could never take mercury internally under any form; when persevered in for a few days in this manner, it always produced distressing tenesmus, and great bodily and mental depression.

Up to December 2nd, the baths were administered every third day: on that date all the ulceration had healed; a very small granulating healthy sac only remained in the centre of the site of the old disease. Gums sore, appetite good, no salivation. All the skin disease had disappeared. This patient was under my treatment three weeks, during which time he took fourteen baths. He pursued the treatment after he left me for some time; but the cure has been perfect.

On writing to me a few weeks afterwards, he says, "My medical friends are quite astonished at the rapid progress I have made under the use of the vapour, both in regard to my throat and my general health."

CASE LVI.

Constitutional syphilis under various forms for three years; failure of various remedies, especially the iodide of potassium; cure by the mercurial vapour bath.

A young gentleman, apparently healthy, contracted a primary sore in 1849, which was four months healing, and left behind it an induration which lasted two months longer. The throat was attacked with secondary syphilitic ulceration before the chancre had healed. In 1850 he had an attack of skin disease, which was succeeded by nocturnal pains in the head and legs; these pains, being partially benefited by medicine, recurred with so much violence in January, 1851, that he was confined to bed till March. The pains were always mitigated, and sometimes removed for a short period, by the iodide of potassium; but when this remedy was laid aside they invariably returned, a circumstance which very frequently attends the treatment of syphilis by the iodide, which the history of the next case illustrates in a very marked degree.

In August, 1851, this patient placed himself under my care. I did not see him in any of the previous attacks which I have mentioned. He had, at the present date, constant severe pains of the arms, legs, and bones, which were worse on damp days, and when in bed. There were also pustulo-crustaceous spots on the head, and a dry, red throat. All the symptoms disappeared under one month's treatment by the vapour, and the use of the decoction of guaiacum. In twelve months afterwards no pain was felt. Early in 1852 there was a very slight return, which was removed by the treatment first adopted, which was again followed for a very short time; since that period there has been no fresh symptom, and the patient has appeared perfectly well.

CASE LVII.

Constitutional syphilis for twenty-four years; repeated salivation; prolonged use of the iodide of potassium; failure of these remedies; great relief and cure of many of the symptoms by the mercurial vapour bath, &c.

A surgeon, æt. 47, consulted me in May, 1850, for various symptoms of constitutional syphilis, from which he had suffered for twenty-four years. He had, at the time when he consulted me, syphilitic sarcocele of the right testis, complicated with a small hydrocele; a well-marked syphilitic psoriasis of the hands, which were like a fish's skin, so thick and hard were many of the scales; at times the hands became painful and inflamed: he had also general thickening, with enlargement of the tongue, which was covered with hard lumps, between which were deep fissures, extending nearly through its whole substance.

This patient had taken ten grains of iodide of potass three times a day for ten years; his appetite was bad, and he looked dry and shrivelled. When the iodide was omitted, the hands always became painful and inflamed, but no farther progress towards a cure was made by the use of this remedy; when discontinued for a few days, all the symptoms returned as badly as ever.

I recommended the use of the mercurial vapour bath three times a week, ten grains of the extract of conium at bed-time, with the cold infusion of sarsaparilla in lime-water. I must confess I felt very uncertain about the issue of this case. In November, *i. e.*, about six months after I had first seen this gentleman, he called again on me: I did not know him; he had regained his flesh and appetite, and the hands were well; the tongue most materially improved, and the sarcocele much reduced. He was under an engagement to marry, and stated that his health had never been so good as now, since the first outbreak of disease twenty-four years ago.

CASE LVIII.

Pustular syphilitic disease of the skin, with other symptoms of constitutional syphilis, for two years; various treatments without effect; rapid disappearance of the symptoms by the use of the mercurial vapour bath.

A gentleman, æt. 34, of delicate health, was sent to me, on June 24, 1850, labouring under a most formidable attack of secondary syphilis. He had had primary sores two years before, and various forms of eruption on the skin, from that time to the present. This patient's disease was what I have described as "pustulo-crustaceous." There were large distinct pustules on the face, head, body, and limbs, to the number of about thirty-five. In two places, the pustules were smaller and placed in groups; this happened on the forehead, and on the chest. The pustules soon became covered with dark-coloured, laminated, or conical crusts, closely adherent to the parts underneath, and surrounded for a short distance by a deep-red or livid margin. The crusts, when detached, were found to have covered ulcers more or less deep, which, if healed when the crust fell off, left behind it a deep and vividly red cicatrix, slightly depressed; if the crust were detached before the ulcers they covered were healed, the ulcers were superficial, but foul, unhealthy, and disposed to spread; the crusts situated over bones, or on the forehead, ulna, and ribs, when detached, always left a deeper depression than on the skin, and the surface of the bone over which they were placed was always absorbed to a slight extent. In addition to this formidable local mischief, the patient was weak, emaciated, had night-sweats and diarrhœa.

The mercurial vapour bath was used for a few minutes each day, opiates were administered at night, and the cold infusion of sarsaparilla in lime-water was given. Nourishing diet, wine and ale being freely given.

On July 5th, a great part of the crusts had fallen, and had left the skin sound underneath; many of the sores looked healthy, others not so; the general health much better; appetite good; bowels were settled; strength daily improving; patient bears the baths for a longer period with comfort; mouth sore, no salivation.

In six weeks, the time I personally treated this patient, twenty baths were taken; and at the end of this period all the crusts had fallen, and all the sores had healed; the bowels were regular, and the health and appetite good. The red colour of the cicatrices remained for some weeks, gradually dying away; this is always a work of time. The patient has continued in good health since, and there has been no recurrence of any fresh syphilitic symptom.

Case LIX.

Constitutional syphilis for seven years; failure of various remedies—amongst others, the iodide of potassium, and mercury pushed to salivation; complete cure by the mercurial vapour bath, and very small doses of the biniodide of mercury.

A married lady, æt. 30, was brought to me by her husband, from Paris, to be treated by the mercurial vapour bath. She had suffered from constitutional syphilis for seven years, but had never had any primary affection; neither, on careful and minute examination, could I detect any disease of the sexual organs themselves. Her disease consisted in dusky red patches spread over the whole body, covered with a dry dandriff or scurf, not to be called a scale: in places the disease assumed the form of irregular patches; in others, circles or rings: they were uniformly spread over the back, arms, chest, &c. On the knee was a ring of rupial crusts, resting on an inflamed base. The patient had suffered from ulcers of the throat, and had entirely lost her hair.

For seven years this disease had remained uninfluenced by remedies. A leading surgical authority did me the honour to recommend my plan of treatment to be tried in this case, as mercury under the usual forms, iodides, decoctions of the woods, &c., had all failed.

The treatment by the mercurial vapour bath was commenced on the 16th of July, 1851. The baths were used three times a week, sometimes more frequently, and one twelfth of the biniodide of mercury was given in solution three times a day in water. On the 12th of August the skin was clear; all the coppery red stains, in circles and patches, had disappeared; the skin clean and soft; the rupial ring on the knee, or rather the dark stain it had left, was fast disappearing. At this period, the patient left me. The baths were resumed again, after the lapse of a week, for a month; since which period the cure has appeared perfect, the health has been good, and no other symptom of syphilis has appeared. The gums were sore and spongy from the baths, but no salivation was produced.

CASE LX.

Constitutional syphilis, with bad health, for seven years; failure of iodine, and mercurial treatments, as commonly conducted; disappearance of all the symptoms after a treatment by the mercurial vapour bath, with the biniodide of mercury and the iodide of potassium.

A barrister, æt. 30, placed himself under my care in August, 1850. He had suffered from constitutional syphilis for seven years, for which he had undergone a variety of treatment, under the combined influence of which, and his disease, his health had become completely broken. When he first visited me, he suffered from the following syphilitic symptoms: The face, arms, and body were covered with large pustulo-crustaceous patches; these patches consisted of a red base, upon which were placed dark, flat crusts: some of these crusts were large, others small; they did not cover ulcers. In other places there were large lividly red blotches elevated above the skin; after a time these suppurated slightly in the centre, and became covered with a thick, black, flat crust. On the cheek, just below the orbit, on the left side, was a large solid tumour, lividly red on its surface, but presenting no fluctuation (syphilitic tubercle). Under and around each blotch, the skin was thickened and indurated; this thickening evidently implicating the whole thickness of the skin. Both legs were painful, and the shin-bones were uneven and tender to the touch. The patient was weak, tormented with night perspirations and pains, the digestion bad, and the bowels disposed to relaxation.

The treatment was commenced on August 20th, and consisted of the following plan: The mercurial vapour bath four times a week, with the twelfth of a grain of the biniodide of mercury in solution, with three grains of the iodide of potassium twice a day; at night, the patient took ten grains of the extract of conium, and drank half a pint of the warm decoction of guaiacum; the diet to be good, but not stimulating. This gentleman was treated personally by me for eighteen days; he took fifteen baths; at the end of that time the skin was soft and healthy, with the exception of some slight red stains, where the ulcers and tubercles had been situated. All the induration and thickening were gone. The pains in the limbs and the night perspirations had also left. The gums were puffy, swollen, and sore; no salivation.

He was directed to continue the use of the vapour three times a week, and to drink the cold infusion of sarsaparilla in lime-water.

Writing to me in October, this patient says: "I have already commenced the beginning of the end of the treatment; I am wonderfully improved in my general health, and every appearance of disease has entirely disappeared. I am enjoying an elasticity of body and mind I have been a stranger to for many years. I shall think it my duty to humanity to become the propagandist of your system of treatment."

CASE LXI.

Constitutional syphilis for two years; failure of various remedies; cure by the mercurial vapour, without any other remedy.

A gentleman, æt. 23, placed himself under my care in January, 1849, suffering from the following symptoms: Sarcocele of the right testis; severe nocturnal pains in the head, arms, and legs, their severity preventing rest at night altogether;

a general copper-coloured mottling of the face, chest, and abdomen; three well-marked large syphilitic tubercles on the cheek: he had suffered from various forms of secondary syphilis for two years; had taken so much medicine that he declared it was impossible for him to take any more, let the consequence be what it might.

I placed him on a milk diet, and commenced the use of the mercurial vapour, on January 17th; the head was placed in the bath; on February 4th every symptom had disappeared. On June 1st, a few scaly spots reappeared on the hands; four baths were taken, the symptoms disappeared; the patient, whom I frequently see, has enjoyed the best health since that period. No medicines were taken.

Case LXII.

Ulceration and pains in the throat, thick scaly blotches, with burning and heat of the hands and feet; cure by the mercurial vapour.

A gentleman, æt. 24, had suffered from many forms of secondary syphilis for eighteen months, many of which had disappeared under treatment; but there remained an ulceration of the throat, accompanied by occasional severe pains in that part; but the chief symptoms of annoyance were the hands, each of which was covered for three parts of its surface with a thick scaly red patch, occupying the whole of each palm, and part of the thumb and fingers. The hands were always hot, and a painful burning sensation was seated in the extremities of the fingers; the feet were also hot and hard, but had no scale or patch upon them. Medicines of many kinds had utterly failed in relieving these symptoms.

The vapour treatment was commenced on June 30th, and on August the 22nd the hands appeared healthy; all the scales were gone; the skin soft, pliable, and healthy. Some heat remained at times, and occasionally the parts were red and mottled; the hands were smeared with a little zinc ointment, and the patient slept with them in compresses soaked in a lotion composed of camphor mixture, spirits of wine, and glycerine. In three months this cure was perfect.

CASE LXIII.

Superficial primary sores; inability to take mercury; healing of the sores under ordinary treatment; secondary disease in the skin, throat, and nose; cure of all the symptoms by the mercurial vapour bath.

A gentleman consulted me respecting certain symptoms, which he considered, and which doubtless were, due to constitutional syphilis. He had primary ulcers eight months previously, for which he could not take mercury; the smallest quantity produced diarrhœa, and it even affected him so when used by friction. The ulcers had healed under a simple treatment, but soon afterwards the skin became covered with small scaly blotches; there was a deep redness of the throat and nasal fossæ, and the hair and eyebrows came off rapidly. He had taken iodine and sarsaparilla under various forms without success; occasionally there was a partial amendment, but he constantly relapsed when medicine was discontinued.

The baths were used twelve times, the gums rendered uneasy and swollen, but nothing more; not a bad symptom accompanied the treatment, and the patient has had no fresh symptom for fifteen months. He took no internal medicines whilst under my care. The third bath checked the falling off of the hair and eyebrows, which began rapidly to reappear before the termination of the treatment.

CASE LXIV.

Phagedena of the throat immediately arrested by the use of the mercurial vapour bath.

A lady, æt. 34, had a superficial ulceration of the throat, her husband at the same time suffering from the same disease. She had also large pustular scabs on the legs, and her health was bad. She took the bichloride of mercury with sarsaparilla, for some time, and apparently recovered. For six years she remained apparently well. In May, 1846, she began to suffer from cough, and emaciated a good deal, yet there was no physical sign of disease of the lungs. At this period she complained of sore throat, and on inspection the soft palate had a swollen, thickened appearance. In this state she went into Wales, from whence she returned in a fortnight, her throat having got rapidly worse. There was now a small hole in the soft palate, with a white margin, and the whole of the throat was intensely red; there was also an ill-conditioned ulcer, with a white slough, in the left nostril, which threatened speedily to perforate the cartilage of the nose.

The danger was imminent, and the state of the parts such as to lead me to fear a very serious and extensive mutilation, as the ulcers in the throat and nose had only been present two days, and already the soft palate was eaten through in one place, and two other small ulcers threatened to perforate it in others.

What was to be done in such a case? There was no ordinary mode of treatment that could have been brought to bear upon such a state of things in less than three or four days, and by that time the mutilations would have been fearful, as disease was spreading with great rapidity.

I determined to submit my patient at once to the action of the mercurial vapour bath, in which she was placed with the head immersed, for half an hour; this was repeated on the next and succeeding days, when the gums became tender and swollen. The first bath arrested the whole of the ulcerative process; on the third day the sloughs had fallen, and the ulcers looked healthy. Six more baths, at longer intervals, completed the cure, there not remaining, at the end of eighteen days, any apparent disease, except the perforation in the soft palate, which was small, and occasioned but little inconvenience.

I directed this lady, who was of a weak habit of body, to take afterwards for some time the iodide of iron, with a decoction of sarsaparilla. She has had no new symptom. The cure has been permanent hitherto.

CASE LXV.

Discharge from the urethra as a primary symptom; scaly blotches on the skin and a node on the forehead, as constitutional symptoms; perfect cure by the mercurial vapour bath.

A gentleman consulted me respecting a lump on his forehead, which was red, tender, and painful; he had upon different parts of the body, and on the head more particularly, some dry, scaly blotches; his hair also came off rapidly. He had no primary venereal disease, except a discharge from the urethra, concerning the nature of which there had been some difference of opinion. It clearly had not been gonorrhœa, and had resisted the usual remedies employed in that disease. The discharge no longer existed when I first saw the patient, and I could not find in the urethra, on examination, any trace of the previous existence of an ulcer.

I recommended the use of the baths, which were given every other day. I prescribed no internal medicines. At the end of three weeks all the symptoms had disappeared, and the hair was coming on rapidly.

About a year afterwards this gentleman called on me, when passing through Birmingham, and told me he had not had any return of complaint.

Loss of the hair is one of the commonest symptoms of constitutional syphilis, and one which generally follows superficial sores; its nature is frequently deceptive, since, if it occur at that period when the hair is lost from natural causes, it is very apt to be overlooked altogether. I have seen several instances of this. On carefully examining a patient where this appears the only symptom, we shall commonly find others to strengthen our diagnosis, if the loss of hair arise from venereal taint. One of the most common is an inordinately red condition of the mucous membrane of the nostrils, with or without any increased or altered condition of the secretions from these parts.

I consider the baths in such cases all but specific; I have never seen them fail. In almost all instances one or two baths have arrested the fall of the hair, and before half-a-dozen have been taken the hair almost invariably begins to grow and thicken. I have seen the eyebrows and whiskers, lost under these circumstances, quickly restored by the use of the baths.

Where it is important to produce a marked and immediate impression on the system, &c., to arrest the progress of rapid ulceration, as in the various forms of phagedena, this plan of treatment cannot be estimated too highly. I have seen phagedena in the nose, throat, and on the penis, stopped at once by immersion in the baths for half or three parts of an hour. No other remedy can be brought to bear thus speedily upon diseases of this nature, and the mutilations and losses of substance which occur in such states take place whilst we are waiting for the action of remedies.

CASE LXVI.

Phagedena of the urethra and glans penis arrested immediately by the baths.

A gentleman contracted, from a suspicious connection, a discharge from his urethra, which in the commencement was supposed to be gonorrhœa, and for which he was treated. The discharge did not yield to the remedies employed, and about ten days afterwards there appeared round the orifice of the urethra a white ring of ulceration, which spread rapidly. His surgeon became alarmed, and sent him to Birmingham to be placed under my care. When I first saw this case, there was an ulcer the size of a shilling surrounding the meatus, covered with a white slough, and the whole of the glans penis was intensely red, swollen, and shining. On separating the lips of the urethra, the ulcer was seen to extend some distance down the passage.

I placed this patient immediately in the bath, and kept him there nearly an hour; he was directed afterwards to take a full dose of opium, to apply some decoction of poppies to the part, and to confine himself strictly to bed. On the next day the bath was repeated, and the same practice followed. On the third day the bath was again taken, by which time the sloughs were separating, and a healthy granular surface appeared underneath.

There had been no extension of ulceration since the first bath. Nine baths completed this patient's cure in less than three weeks; and the medicines employed, as well as the local applications, were of the simplest character. The mutilation was very trivial. The under surface of the urethra and glans penis was destroyed to a small extent, but from this the patient suffered very little inconvenience.

This was a case of phagedenic ulceration, commencing, as it frequently does, in or at the orifice of the urethra, with the nature of which I was unhappily too familiar, having seen frightful mutilation from sores of this nature under ordinary plans of treatment.

The first case of secondary phagedena of the throat in which I had employed the mercurial vapour bath, had been so successful, that I felt confident of success here, and the result justified my expectations. I reflected that rules of practice in cases of phagedena were quite unsettled, mercury being frequently employed as a last resource after the failure of other remedies. It is during this period, of bringing remedies to bear upon the disease, and the uncertainty of what to use, that the mutilations so commonly witnessed in such diseases occur. The remedies which I advocate are without risk, and may be employed from the very first appearance of phagedena, with every hope of success even in the worst cases.

CASE LXVII.

Chronic enlargement of the testis; successful treatment by the mercurial vapour bath.

A gentleman, æt. 26, contracted from a suspicious connection superficial sores which were situated on the glans and prepuce; he had succeeding to these, enlargement of the glands in the left groin, which were painful and tender, but after a time subsided without suppuration. Some time afterwards this gentleman married, and soon afterwards the right testis began to feel heavy and uneasy, and gradually increased in size.

When I was first consulted on this case, the testis was as large as a turkey's egg, hard, but not painful or tender. I considered it of venereal origin; the patient was not of strumous habit or family, and, on examining him carefully, I found that his hair came off, and that the mucous membrane of the nostrils was intensely red, and there were one or two spots of superficial ulceration.

I recommended this patient to use the baths every other day. After the fifth bath the gums were a little uneasy, and, generally, red and elevated. The patient took five more baths at longer intervals. The cure was complete in six weeks, the patient pursuing his customary avocations during the whole time of treatment.

There can be no question as to the venereal origin of this disease of the testis. The history and concomitant constitutional symptoms place the matter beyond doubt. I consider the condition of the mucous membrane of the nostrils very important as a test of the nature of many constitutional forms of disease, about the true character of which there might otherwise be some degree of uncertainty. If this disease of the testis had occurred without any other symptom, there might have been a doubt as to its true nature; but, coexisting with loss of the hair in a young man, and with an inflamed and ulcerated condition of the nostrils, we cannot hesitate to pronounce it syphilitic.

The ordinary treatment of such a disease would have been either a long, uncertain treatment by iodine, or a more certain mercurial course, which must have confined the patient to the house, and most likely to his bed, for an uncertain period. The baths were perfectly successful in a short time, without one hour's confinement, or hindrance from business, and with benefit rather than injury to the general health; a risk that must be always run under the ordinary forms of mercurial treatment.

CASE LXVIII.

Regular primary sore, with induration; succeeded by pustular disease of the skin, and impaired general health; rapid cure by the mercurial vapour bath.

A young gentleman contracted a chancre, the knowledge of which, from certain family reasons and fears, he for some time kept to himself. Several weeks afterwards I first saw him, and he had then undergone no treatment. There was a considerable induration between the glans and prepuce, on the summit of which was the primary sore not yet healed. The skin was covered with a well-marked pustular eruption. The pustules were in various stages, some recent, others broken and covered with eschars, and others again had degenerated into open sores. He was pale and emaciated, and his general health much impaired by his disease, which had now existed fourteen or fifteen weeks. His state of health was such as entirely to preclude a mercurial course, either by the mouth or by friction.

I recommended the use of the baths, and directed him to take half a grain of the extract of opium three times a day, and some warm decoction of sarsaparilla night and morning. The open ulcers were dressed with a weak black-wash, covered with oiled silk, and bandaged. This patient took fourteen baths. At the end of a month he was well, had recovered his health and strength, and his disease was cured. He has had no fresh venereal symptoms for some years.

In this case there was both a primary and secondary disease to combat; a primary indurated venereal sore yet open, when the constitutional or secondary symptoms appeared, and these occurring in a constitution originally delicate, and still more impaired by syphilis. It is, in such a class of cases, exceedingly common, that the application of the moist mercurial vapour is invaluable, perfectly harmless in its application, and all but positively certain in its effects.

CASE LXIX.

Pustular disease of the skin; ulcers of the throat; severe nocturnal pains in the hips, legs, and head; impaired general health; rapid cure by the mercurial vapour bath.

A young man, æt. 24, was sent to me, suffering from a formidable skin disease of venereal origin. He had had twelve months previously what appeared to be a regular primary sore, for which he had taken mercury to salivation. Under this treatment the ulcer closed; but before it was quite well he became covered with a well-marked eruption of venereal pustules. The disease had run the regular course of all pustular venereal eruptions. The pustules were, in some places, recent, in others covered with dark-brown crusts; the crusts had fallen off in other situations, and left foul, dirty, irregular sores underneath; in one or two places the ulcers had healed, and left deep-red depressions in the skin. In addition to the skin disease, there was an ulcer on each tonsil. This patient was pallid, weak, and emaciated, and so crippled with pains in the hips and shin-bones that he could not walk without a crutch and a stick, and got up-stairs with the greatest pain and difficulty. He had undergone a variety of treatment without success.

This patient was directed to take the baths every other day. I prescribed for him small doses of opium and camphor, and the decoction of guaiacum to be drank warm morning and evening.

The ulcers were dressed as in the last case. After the third bath this patient walked up-stairs without assistance, and his pains were all but gone. In less than six weeks he was quite cured; he had gained flesh considerably, and his appetite and health were good. He had not been confined an hour by his treatment, and he has never relapsed, a circumstance so common after ordinary mercurial treatments. He had tried the common vapour bath when away from me with very little benefit.

The mercurial vapour bath is very efficacious, if not specific, in removing those pains, compounded of syphilis and mercury, which have been produced by or succeeded to internal mercurial courses, prescribed for the cure of either primary or constitutional syphilis. The detail of the last case illustrates this position. I can bring forward another in support of it.

CASE LXX.

Severe pains in the limbs, succeeding to a primary and secondary venereal disease, treated by large quantities of mercury internally; radical and quick cure by the baths.

A young gentleman contracted syphilis in a seaport abroad, and was treated by large quantities of mercury by the surgeon of his vessel.

His primary disease was cured, but a pustular eruption subsequently made its appearance, and the glands of the groin on both sides became enlarged and tender. Before he returned to England the skin disease had nearly disappeared, but there remained copper-coloured depressions in the skin, marking the situations where the pustules had been, and these places were at times much inflamed and threatened to ulcerate again. The worst symptoms under which this patient laboured, were pains in the limbs, groins, and different parts of the body, due either to exposure during his mercurial course, or to a combination of the remedy and disease yet remaining in the system. The pains harassed him severely, and an apprehension of a farther outbreak of disease rendered his life wretched.

I directed the baths to be used every other day, gave him small doses of opium, and recommended him to drink some warm decoction of guaiacum night and morning. He got rapidly well; in a few weeks the depressions were no longer discoloured, the pains had left him, and the glands in the groin were reduced in size. This patient was radically cured; he has never relapsed.

It sometimes happens, I may say frequently, that patients who had passed through the whole ordinary routine of treatment for the cure of syphilis, and have been subjected to mercurial courses in different ways, three or four times, apply for relief for symptoms that still remain uncured, or which have appeared after they had believed themselves perfectly safe. These symptoms are very commonly confined to the epidermis and its appendages, and make their appearance in the form of dry scales on the palms of the hands, from which the epidermis ultimately peels off; sometimes the nails crack and break, or dry, shining scales appear about the matrix of the nails themselves. Sometimes there are dry, white patches on different parts of the skin; and with these appearances there is commonly a dryness of the throat and nostrils, and the hair and whiskers almost invariably get thin. There are sometimes coexisting with these symptoms, pains of various kinds both in the bones and soft parts. In such states, after almost all varieties of internal remedies have been used, and yet disease remains, the baths become of the greatest utility, and rarely fail in working a speedy and permanent cure. I bring forward one or two cases in illustration.

CASE LXXI.

Regular primary sore; treatment by frictions; skin and throat disease as secondary affections; subsequently peeling of the epidermis from the palms of the hands.

A gentleman contracted what appeared to have been a regular primary venereal ulcer, for which he took mercury by the mouth, and also used it by friction. He was salivated by this treatment. The ulcer was some time in healing; and before it was quite closed he became covered with red, shining patches, and had a sore throat. For these symptoms he underwent a further mercurial treatment. For some time he fancied himself well, though occasionally would break out a scaly blotch on various parts of the body. To these he paid little attention. At a later period, the palms of the hands, in places, appeared as though they had been blistered; the epidermis was raised, as by a blister, and then peeled off, spreading in circles exactly like fairy rings. Both hands were affected.

He was directed to use the mercurial vapour bath every other day for half an hour, and to drink some warm decoction of guaiacum. There was no complaint remaining at the end of six weeks, and there has been no relapse. He has remained without any fresh symptom for nearly four years.

CASE LXXII.

Superficial primary ulcers in the commencement; scaly blotches on the skin, superficial inflammation and ulceration of the throat, peeling of the epidermis from the palms of the hands, scaly condition of the nails; loss of the hair, eyebrows, and whiskers: cure by the baths.

A gentleman consulted me for superficial ulceration of the throat, which he considered was venereal, and which doubtless was so, for it was accompanied by other symptoms which could not be mistaken. The membrane of the nostrils was intensely red; there were a few scaly spots on the body; the epidermis peeled off in white, dry patches from the palms of the hands; and the same scurvy condition existed round the roots of the nails. The eyebrows and whiskers fell from the least touch. This patient had taken mercury in various ways; his disease from time to time abated, but he constantly relapsed, and the symptoms I have detailed had been in existence nine months. The primary disease had consisted of three or four superficial sores, which he had been assured were not venereal.

As this affection was perfectly chronic, and not making any rapid advances, I directed the baths to be used only twice a week, and during their use a teacupful of warm decoction of guaiacum night and morning. In six weeks this patient got well, and after many months had not had any fresh symptom.

I have to speak now of one or two cases of a different kind to any previously detailed, namely, the indurations which are left after, or succeed to, the healing of primary venereal ulcers, and in which I have seen the "moist mercurial vapour" succeed after the failure of other modes of treatment pursued for long periods without success.

Case LXXIII.

Superficial primary sores; secondary disease of the skin under the form of shining, red, copper-coloured patches; subsequently a large induration as hard as cartilage, occupying the site of the original ulcers.

A gentleman contracted some superficial sores upon the penis, which he was assured were not venereal, and would not be followed by constitutional symptoms. They healed, and the patient went abroad. On getting up one morning, he perceived his skin covered with red, shining patches: being alarmed, he immediately set off for London, where he was told the eruption was venereal, particularly as there accompanied it an ulcer on each tonsil. He was put upon a mercurial course, and the eruption, after a time, got well. About this time an induration made its appearance in the situation of the original ulcers, and kept increasing till it was as large as a small walnut. Notwithstanding the continuance of the mercury by the mouth, the induration remained stationary, and at this period the patient placed himself under my care. There was a large induration, having the appearance and feeling of cartilage, occupying the place of the original sore. It did not seem a general thickening of parts, but like a piece of cartilage in and under the skin. Mercury under two or three forms had failed to remove this.

I placed my patient under the use of the vapour bath, which was applied three times a week for a month, half an hour each time. He drank a little warm decoction of guaiacum twice a day, and occasionally took an aperient. A month's treatment was sufficient to remove the induration, and no other symptom of syphilis remained when the employment of the baths was discontinued. There has been no relapse, a very common circumstance with indurations of this character, which I have known frequently return after the discontinuance of mercurial treatments by the mouth.

The indurations which remain after the healing of ulcers of suspicious character, or which come on after they have healed, as they often do, are among the most obstinate symptoms with which surgeons have to contend. In themselves they are a sure indication of constitutional taint, and are either, if left to themselves, followed by secondary diseases of a formidable character, or, ulcerating from slight causes of irritation, give place to rapidly-spreading and destructive sores; they are exceedingly rebellious, and sometimes remain after the pursuance of various forms of constitutional treatment for long periods. Local treatment by frictions soon renders them painful, and disposes them to open. In these forms of disease the mercurial vapour is very valuable, though it does not act with the rapidity it generally does in affections of the skin, throat, or nose. (See page 130.)

Case LXXIV.

Regular primary sore on the frænum; mercurial treatment: copper-coloured scaly eruption on the back, superficial ulceration of the tonsils, ulceration of the mucous membrane of the nose; discharge of pus, blood, and thick crusts; pains in the hip and shin bones: second mercurial treatment; failure of success; speedy cure by the baths.

A gentleman contracted a sore on the frænum, which healed under a prolonged mercurial course, during which he took a hundred five-grain mercurial pills. He fancied himself well. Three months afterwards, a copper-coloured scaly eruption appeared on the back, the tonsils became enlarged, and their surface was ulcerated; he had a discharge of quantities of hard mucus from the back of the throat, which appeared to come from the nose, and the nostrils also gave passage to substances of the same character, mixed with matter and blood. His nights became bad, and he was tormented with severe pains in the hips and legs, which prevented him from sleeping. For these symptoms a second surgeon was consulted, who recommended a blue pill three times a day, and some other medicines.

The mouth was kept sore for three months, during which period the patient took one hundred and forty more pills. Under this treatment the eruption on the back disappeared; but the other symptoms in the nose and throat were worse, and the pains in the hips and legs increased in intensity.

This patient now came to me from a distance, and placed himself under my care. At this period the tonsils were large, and on each side covered with ash-coloured superficial ulcerations; the mucous membrane of the nostrils was intensely red, and covered also with ash-coloured spots. There no doubt existed mischief higher up in the nose, as the voice was thick, and the breathing through the nose obstructed. The patient had now suffered from disease and remedy for seven months. He was pale and emaciated, and much depressed in spirits.

I placed him under the use of the baths, gave him small doses of the extract of opium, and recommended him to drink half a pint of warm decoction of guaiacum night and morning. The nose and throat were better after the first bath; and at the end of five weeks, the baths having been taken every other day, this gentleman had no symptom of disease remaining, had lost his pains, and recovered his strength and spirits.

This case is one of the many that might be recorded as an instance of the failure of mercury, given by the mouth in the ordinary way, to cure venereal diseases. The failure is perhaps not so much in the remedy itself, as in the mode in which it is administered. The quantity given is generally too large, and the patient is not placed in circumstances whilst taking it which are favourable to its action. A peculiar class of diseases are by such treatment created, which are compounded of mercury and syphilis, and which are very difficult to cure. These diseases are generally produced by the indiscriminate use of mercury in the treatment of the primary sore. If mercury be required for such a purpose, it must be used according to the plan already laid down. Primary ulcers so treated are never followed by induration; salivation or ulceration of the mouth are never produced; and secondary symptoms very rarely follow.

CASE LXXV.

Superficial ulceration of the throat and nose; alteration of the voice; relapses under internal mercurial treatment for four months; speedy cure by the baths.

A gentleman contracted several superficial sores on the penis, which were attended with considerable inflammation. They healed without induration of the cicatrix; but as the patient had not been seen by me at this period, I do not know what treatment was adopted. About two months after this apparent cure, his throat became dry, particularly the day after any extra indulgence, such as a dinner-party. To this succeeded ulceration; several small ash-coloured spots made their appearance on each tonsil; the nose became dry and uncomfortable; he could not breathe through it easily, it appeared obstructed, and the voice was hoarse and unpleasant. The hair came off in small quantities, and the skin was continually disposed to crack and inflame on the seat of the original sores. This patient had taken mercury internally, at intervals, for six months; but on discontinuing the remedy, his symptoms always returned; and, in addition, the medicine, under any form, after a time, so disordered his stomach, that he could not take it long enough to have any real influence over his disease. No other treatment was adopted in this case except the baths: they were used every other day for three weeks; the head was immersed at intervals during the time the patient remained in the bath, a practice which ought always to be followed where the hair comes off, and in diseases of the throat and nose. The gums were elevated, swollen, and red, but nothing more. The cure was complete. In six months there had not been the slightest relapse.

CASE LXXVI.

Pustular skin disease; induration of the glands in the groin on the left side to a great extent; ulcer and induration on the penis; severe pains in the head and legs; tenderness of the bones of the legs; failure of internal mercurial treatment pursued for four months; cure by the baths and opium.

A gentleman entered my consultation-room one morning, looking pale and emaciated, and walking with a stick and a crutch. He gave the following history of his disease:—Ten months previously he had contracted a sore, which was situated on the lower part of the glans penis, near the frænum. For the cure of this, the primary, or for the prevention of constitutional or secondary disease, he had taken mercury by the mouth to some extent, and for a long period. Whilst taking this medicine, about fifty or sixty small pustules broke out in different parts of the body, chiefly on the arms, legs, and head. His throat about this period became sore, and he had continual discharge from his nose. For these symptoms he was recommended mercury internally in another form. The throat improved, but did not get quite well; some of the pustules also dried up, and disappeared, but were succeeded by others. The general health, previously good, now began to fail; the appetite went; the patient got thin and suffered from night-sweats: he was also tormented during the night with severe pains in the legs and head; those in the ankles and hips at length became so severe that he could not walk without the assistance of a stick and a crutch; and yet, ten months previously, the patient had been in good health, and was only now thirty-two years of age.

On examination, I found a small fissure near the frænum, surrounded by considerable induration; the glands in the left groin were enlarged, hard, and tender, the whole mass as large as a turkey's egg. The throat was red, and covered with four or five superficial, ill-conditioned ulcers: the nostrils were in the same state; on both sides there were ulcers: the voice was hoarse, and there was constantly expectorated a quantity of thick, adhesive phlegm. There were from twenty to thirty fresh pustules, of small size, on different parts of the body. The general health was broken up; the appetite was bad; there was no rest; the tongue was foul; the gums spongy; and the breath fetid. This patient was very much emaciated, and the perspirations in the night were most profuse, bed and body linen being completely saturated.

I looked with considerable anxiety on this case: the local symptoms, bad as they were, I did not fear; these were easily and certainly manageable, but the general health of this poor gentleman was so much impaired that I feared for the result.

He was doubly poisoned, first by syphilis, and secondly by mercury, very probably acting upon a system peculiarly inimical to the use of it, as the general state of health showed, for I never saw such symptoms produced by syphilis where mercury had not been given for its cure.

I ordered this patient to keep his room, and prescribed for him a strong decoction of sarsaparilla, with beef-tea, and recommended him to take, in addition, seven grains of powdered guaiacum, two of opium, and three of camphor, night and morning. The baths were sent to his lodgings, and he took one on the third day after I first him. The bath produced some exhaustion, but he slept well that night without perspiration, and the next day was better. On the third day, again, the bath was repeated with still further improvement; the pustules began to dry up, and the strength was a little improved. Still the appetite continued bad, and the tongue foul; the pains in the limbs still troublesome, though abated. The baths were repeated every third day, and the medicines were continued. No alteration was made in the treatment; as the patient gained strength, the baths were made stronger, and continued for a longer period. This patient remained under my care two months, at the end of which period he left me in tolerable health, which has continued to improve. He has had no relapse.

I do not think it would have been possible to have cured this patient without the moist mercurial vapour. The combination of the vapour bath and the mercurial fume is in such cases invaluable; and wherever the patient is able to support himself on a chair, they may be used with perfect safety, and without risk; the strength and heat of the bath being regulated according to the particular circumstances of the case.

It is in such states that ulcerations, generally fatal under ordinary treatments, occur in the larynx, and low down in the pharynx. I have seen, in the earlier years of my practice, several patients die from these ulcerations, whom I firmly believe would have been saved under the plan I now recommend. Where ulcerations are constitutional, local remedies have little influence over them, except for the moment. Mercury given internally is in such cases almost altogether forbidden by the condition of the general health of the patient. Under the plan I here recommend it may be administered in perfect safety, and is almost the only hope for the patient.

CASE LXXVII.

Discharge from the urethra, and excoriations for primary symptoms: subsequently spots on the body; loss of hair and voice; ulceration of the throat and nose; speedy cure by the baths, after a prolonged mercurial treatment with partial success.

A gentleman contracted from the same connection a discharge from the urethra, and superficial sores upon the penis, which healed in a few weeks with very simple treatment. Some time afterwards he experienced a dryness and soreness in the throat when he swallowed, and his voice became hoarse; these symptoms increased till at length the voice was almost altogether lost, and he merely spoke in a whisper. He consulted a surgeon, who pronounced the disease in the throat to be syphilitic, and recommended mercury to be taken by the mouth, with the decoction of sarsaparilla. These medicines were continued for some time with partial benefit; but, on their discontinuance, the disease in the throat became worse, whilst the voice had hardly been benefited at all. The patient now, by the advice of his surgeon, who resided at a distance, placed himself under my care.

At this period the whole of the throat had a deep-red appearance, the tonsils were much enlarged and tender externally, and their surface covered with superficial ash-coloured ulcers, one or two of these ulcers on each side being deeper than the rest. The uvula was elongated, thickened, and had a tuberose appearance; on its extremity were situated two or three small ulcers similar to those on the tonsils; there was a difficulty of breathing through the nose, the mucous membrane of which was intensely red and superficially ulcerated. There were a few small pustules on the body, and one or two on the head; the hair was thinning fast. The general health was good.

The patient took the baths every other day with the head immersed; he was directed to take also some decoction of guaiacum night and morning; the dose in the evening warm on getting into bed. The gums became very tender after the fifth bath, and his condition was much amended by this time: the spots had disappeared from the skin, and the hair no longer came off; the redness was gone from the throat, and the voice was much improved. At the end of three weeks nearly all the symptoms had vanished. The patient still remained a little hoarse, and the uvula had not quite assumed its natural appearance. I heard from this gentleman, a month afterwards, to say he was quite well.

This is another example of that numerous class of constitutional venereal diseases which follow superficial primary sores; the most marked symptoms of which are superficial redness and ulceration of the throat and nose, with spots upon the skin varying in their pathological characters, and loss of hair. These symptoms are so constantly grouped together in such cases, that I never see one without looking for the others. I believe, where the hair comes off, and the disease of the skin affects its surface only, the mucous membrane of the nose will be found always affected, as well as the throat. These symptoms generally yield with extraordinary rapidity to the use of the moist mercurial vapour, whether this be associated with medicines taken internally or not. In some cases the cure has been expedited by the decoction of sarsaparilla and guaiacum; but I never prescribe mercury internally in such cases, if the patient can take the baths.

CASE LXXVIII.

Ulceration of the throat; large single pustular blotches on different parts of the body at different times; ulcer of the left nostril.

A respectable female was unfortunately diseased by her husband; I know no more of the primary disease, than that she had a discharge upon her, and some superficial sores which soon healed. Her husband and herself had both afterwards ulceration of the throat, which was very rebellious to treatment, but at length healed under a mercurial course. Some months afterwards a large pustule made its appearance on the thigh, and on the arm: these soon dried up, and were covered with large, irregular, black-looking crusts, which, on falling off, left a foul, excavated ulcer beneath. These, after some time, healed, leaving a deep-red depression in the skin. At a subsequent period the left nostril became dry, and rather painful; and, on examination, there was found an ulcer as large as a shilling, covered with a white, thick slough: the remainder of the membrane of the nostril was of a deep, dark-red colour, which colour pervaded also the other nostril, but the latter was not ulcerated. The ulceration was spreading rapidly, and, the patient believed, had only been in existence about two days. When I first saw this ulcer, it only affected the mucous membrane; but its edges were so intensely red, and disease proceeding with so much rapidity, that I apprehended speedy perforation of the cartilage, having more than once seen the soft palate eaten through by an ulcer of this kind in twenty-four hours. I mentioned my fears to my patient, and told her I knew of but one method of speedily, if not immediately, arresting her disease, supposing her case should be as fortunate as some others I had seen submitted to a similar plan of treatment; and this was by means of the moist mercurial vapour, which I advised her instantly to use.

The head was immersed in the bath, and the patient was kept in it for half an hour. The vapour produced, as it sometimes does, a great discharge from the nose. On the next day the redness of the nose was less. The bath was again repeated on this day in the same manner, and for the same time. On the third day the slough had separated; there was very little redness of the nose, and the ulcer looked healthy and disposed to heal. The baths were now continued every other day, and by the time the eighth had been taken the ulcer had healed, and very little complaint remained. Indeed, all that could be said was that the membrane of the nostrils was slightly more red than it ought to be in a perfectly healthy state. This patient did not take any medicine during the time she was using the vapour; the gums became very tender after the fourth bath. She was directed to live on beef-tea, milk, eggs, and cocoa; and her general health, which was before bad, became good; she got fat, and has not relapsed.

CASE LXXIX.

Primary sores treated by an internal mercurial course; afterwards, violent pains in the head, spots on the skin, ulceration of the nose.

A gentleman contracted a sore on the penis, for the cure of which he was directed to take mercury internally; this was done to some extent, and after a time the sore healed, leaving a thickened condition of the prepuce, upon which it was situated. Before the termination of the mercurial course, he began to suffer from violent pains in the head, which were at times so severe as to induce delirium. The mercury was now given up: the pains became less, but did not leave him; and, in addition, the hips and legs were affected with similar pains; the nose became dry, and discharged from time to time hard, foul crusts; and there were also a few scaly blotches on different parts of the skin.

The patient now placed himself under my care, and I recommended to him the use of the moist mercurial vapour, and prescribed for him some small doses of opium, and a decoction of the woods, to be drank warm in bed night and morning. At this period there was superficial ulceration in each nostril, and the membrane generally was intensely red. The patient was in an agony of distress about his nose, fancying it would fall in, in spite of all my assurances that there was no disease either of the cartilages or bones. His monomania was most distressing; it rendered his life miserable. After a few weeks' treatment, the symptoms yielded, the pains were gone, and the ulceration of the nose had healed; though it still remained red, and occasionally discharged a lump of hard mucus. This gentleman had no confidence in any treatment except the baths; and on two occasions, fancying himself worse, travelled from the north of Scotland to have them administered under my care. In about three months from the time of my first seeing this patient, he was perfectly well, did not present a trace of venereal taint, and his mind had become more tranquil; he had confidence in the permanence of his cure, and felt satisfied that his nose was no longer in danger.

CASE LXXX.

Chronic disease of the throat, and loss of hair; failure of ordinary treatments; cure by the baths.

A commercial gentleman, aged 34, was sent to me by his surgeon, for my opinion respecting his throat, which had been affected with syphilitic ulceration for several months, and had resisted the ordinary means of cure, or relapsed when medicines were discontinued. This patient had suffered originally from several small superficial sores on the penis; some time after the healing of which his throat became dry and inflamed, and his hair began to come off. When I first saw this gentleman, the throat was intensely red, the tonsils enlarged, and their surface covered with several ash-coloured ulcers; the membrane of the nostrils was also very red, and he could not breathe easily through them; his sense of smell was much impaired; and he had entirely lost his hair, and was obliged to wear a wig. I could not learn the exact mode of treatment that had been employed; but his mouth had been made sore two or three times by mercury.

He was directed to use the baths every other day, and to take very small doses of the bichloride of mercury, not exceeding the twelfth of a grain for a dose, with some decoction of guaiacum, and an opiate at night. The plan was pursued for a month; at the end of this period the throat was well, and he has never again relapsed.

It is a singular fact, and one which I have verified in some hundreds of cases, that the same medicines which have been *unsuccessful* before the use of the baths, will speedily act beneficially when employed in conjunction with them, though given in very much smaller doses; and the treatment which has been followed by repeated relapses without the baths, becomes permanently efficacious when employed with them.

CASE LXXXI.

Superficial primary sores; inflammation and enlargement of the glands in the left groin; mercurial frictions, &c., without success; cure by mercurial frictions and the baths.

A gentleman consulted me respecting some abrasions on the penis, which he had perceived after a suspicious intercourse. They quickly healed; but after a hard day's hunting he perceived a tenderness in the left groin, and the next day walked with difficulty. Being at that time in the North of England, he consulted a surgeon, who told him he was suffering from bubo, and a mercurial course was necessary. He took mercury by the mouth, and rubbed in some mercurial ointment into the thighs till the mouth was sore. The glands in the groin continued to enlarge, and it appeared probable they would suppurate. Getting alarmed about his state, he now placed himself under my care.

At this period, he could not walk; the mass of inflamed glands was as large as a turkey's egg, red at the summit, exceedingly painful and tender, and from a feeling of fluctuation given to the finger it appeared probable that matter had already formed. I had, however, so repeatedly seen surgeons deceived as to the presence of matter in cases like the present, and protracted diseases produced by incisions, that I abstained from making a puncture in this case, and believe that the lancet in all cases of this description should be used with extreme caution. The patient was much emaciated, and worn out by pain, want of rest, and night perspirations.

I applied a blister over the bubo, gave him an opiate at bedtime, and, after two or three days' rest, recommended that he should commence the use of the baths every other day, and rub in every night half a scruple of mercurial ointment. This patient left me well in five weeks. He had pursued mercurial treatment for three months previously, without the slightest benefit; not the least impression had been made upon his disease. This gentleman has remained perfectly well; it is fifteen months since he was under my care, and he has had no relapse of any kind.

It is remarkable what small quantities of mercury are required internally to combat very formidable diseases, when this remedy is given in conjunction with the baths. Mercurial treatments so conducted are never attended with mischief; and salivation or ulceration of the mouth is never produced, at least with the most ordinary care, whilst the disease as certainly yields.

I will now detail another case where mercury had been taken at intervals for five months for an induration succeeding to the healing of a venereal sore, whilst the patient got well, placed under the same circumstances, when he used similar remedies, and took the baths in conjunction with them.

Case LXXXII.

Superficial primary sores, succeeded by an extensive induration, spots on the skin, node on the arm; relapse, after an apparent cure by internal treatment alone; permanent cure by the baths.

A gentleman contracted three or four superficial sores, which quickly healed, but soon after there appeared on the substance of the prepuce an induration which surrounded the upper portion of the penis. Under the advice of his surgeon, he took mercury internally, and also used it by friction; and, under this treatment, continued for three months, the induration disappeared. About a fortnight after the discontinuance of the medicines, the induration began to reappear, and in a few days was larger and harder than before. The patient now recommenced the use of medicines; but after having taken them nearly four months, the induration still remained the same, and the periosteum of the ulna of the left arm became inflamed, and a few scaly spots made their appearance on different parts of the body.

The patient, at this period, came under my care; the induration, the principal feature of the disease, was like a piece of cartilage under the skin; but the whole of the upper portion of the prepuce was full and red, and the induration was tender to the touch.

I recommended the baths every other day, and advised the medicines to be continued, which consisted in a solution of the bichloride of mercury in the decoction of sarsaparilla. The spots soon disappeared, and were seen no more; the tenderness of the arm next yielded; the induration was longer in giving way; after the third bath, however, it was manifestly softer and less tender, but had not entirely disappeared for ten weeks, the treatment having been from time to time interrupted by the business avocations of the patient.

I do not believe it would have been possible to have cured this patient by internal medicines alone. He had continued them for three months in the first instance before the induration yielded; and it was clear that the constitutional taint still remained, by the return of disease, the moment the remedies were suspended, with the addition of fresh symptoms.

In the second instance the internal remedies were of no avail, although continued for nearly four months. Yet the disease yielded in ten weeks when the baths were used, and the same medicines were taken with them. There has been no relapse after the second treatment, and the cure has been perfect.

Case LXXXIII.

Constitutional syphilis of two years' duration: enlargement of the left testis; nocturnal pains; night perspirations; emaciation; thickening of the bones of the nose on the left side; ulcer of the septum of the nose, and obstruction of the naso-lachrymal canal; failure of ordinary treatments pursued for two years; cure by the vapour in four months, with the exception of one symptom.

A delicate-looking young man came to request my opinion respecting the symptoms under which he laboured, which had harassed him, with little variation, for the last two years. Latterly he had become worse, and the complaint in his nose rendered him very anxious, more especially as his surgeon had given him a very unfavourable opinion with regard to its termination.

About two years and a half ago he had contracted superficial sores upon the penis, which had healed under ordinary treatment, and for which he had taken mercury by the mouth, though I could not learn to what extent. About two years ago, he observed a continual discharge from the nose; and this was sometimes mixed with matter, and occasionally with blood: at intervals of two or three days, or a week, there came from his nose hard crusts of dry mucus, bearing the shape of the spongy bones of the nose, and having on the surface which had been adherent, spots of pus, as though they had been thrown off from an ulcerated surface. These symptoms were chiefly confined to the left nostril; and the bones of the nose on this side were considerably larger than those on the right, and tender to the touch. After these symptoms had continued for some months, the eye on the same side began to water, and the tears from time to time flowed over the cheek. On pressing the lachrymal sac, the tears, with occasionally a few drops of pus, could be pressed through the puncta. About this period, the bones of the legs became very painful, particularly at night when in bed; the left testicle began to enlarge without pain; night perspirations set in, the appetite was lost, and the general health became altogether impaired and bad.

At this time the patient came under my care. He was then pale and emaciated: on examination of the nose, I discovered a dirty-looking superficial ulcer of the septum, and of the inferior turbinated bone on the left side; the membrane of the nostrils on both sides was intensely red, the patient spoke thick, and was at times hoarse, doubtless resulting from the condition of the nose. The bones of the nose and cheek, on the left side, were enlarged, tender to the touch, and the skin was slightly red over these parts. The throat was dry and uncomfortable occasionally, though neither inflamed nor ulcerated.

I directed this patient to use the vapour, with the head immersed; to continue it for half an hour; using three drachms of the binoxide of mercury for each bath, which was taken two days together, and then omitted for one.

At the same time, I recommended ten grains of the compound powder of ipecacuanha, with as much guaiacum, to be taken night and morning, and twice in the day a glass of warm decoction of sarsaparilla, with five grains of the hydriodate of potass, and twenty minims of the wine of colchicum.

At the end of a fortnight, the improvement was very marked; the pains were gone, the perspiration had ceased; the patient could eat, and the swelling of the testicle was nearly reduced. The tenderness had disappeared from the bones of the nose, and the fulness was much less. There remained, however, still some discharge from the nose, and the tears still ran over the cheek.

The treatment was continued at intervals for three months; and, at the end of this time, the patient appeared in very good health; he had not a symptom of constitutional taint, unless the partial obstruction of the nasal duct, still remaining, was to be considered as such; and this canal was evidently assuming, though slowly, its natural condition.

I have already stated that an inflamed and ulcerated condition of the mucous membrane of the passages of the nose is a very common symptom of constitutional syphilitic taint; and I have seen a number of cases where it has continued for a very long period of time without extending further than the mucous membrane lining the nose, though in other instances its advances are more rapid, and its consequences more serious. In some instances, syphilitic affections of the nose are limited to a mere chronic inflammation of the membrane lining the meati, and are accompanied by discharges of thickened, dry, mucous crusts, having the shape and appearance of the bones themselves; and this I have known to continue for many years without getting much worse. On examining the nostrils of such patients, they are found to be intensely red, covered with mucous crusts, and the membrane in places slightly ulcerated. The previous history of the patient, the co-existence of some other symptom of venereal taint, and the effects of appropriate treatment, leave no doubt as to the nature of such diseases. In other instances more serious forms of ulceration are present, and these ulcers assume either a chronic or an acute character. I have seen two instances, in one of which there had been a constitutional taint for six years, and in the other for nine, and the nostrils affected the whole period, where an acute ulcer has perforated the septum in a few days.

In some rarer cases, the chronic inflammation of the nose is not limited to the meati, but extends from the inferior one up the nasal duct, and partially or completely obliterates it. I have seen three cases of this kind, one of which had existed several years; and the discharge of tears over the cheek coincided with that of the peculiar syphilitic crust from the nose, on the side on which the obliteration of the duct existed. This is a probable, and, I believe, a common cause of that disease known as "stillicidium lachrymarum." (See Chapter XXV.)

CASE LXXXIV.

Superficial primary sore, followed by bubo; ordinary treatment; constitutional taint five months afterwards, in the shape of copper-coloured blotches on the face, head, and back, with loss of hair and superficial disease of the throat; the disease stationary under ordinary treatment for six months; cure by the vapour in nine weeks.

A gentleman contracted, in February, 1847, a superficial sore, which was succeeded by a bubo which did not suppurate; the patient was treated in the ordinary manner, and he fancied for three or four months that he was quite well. In June of the same year he had superficial ulceration of the throat, and about the same time he perceived a large copper-coloured or dark-brown spot on the forehead, just above the root of the nose; another soon appeared on the side of the nose, one on the right cheek, and several of smaller character on different parts of the face, neck, head, and back. The hair at this time came off in large quantities when brushed or combed, and soon became very thin. These spots were neither preceded, accompanied, nor followed by inflammation, ulceration, or desquamation of the skin; and they are to be distinguished from that kind of discolouration of a venereal character which is seated in the cicatrix of a constitutional ulcer of the skin after it has healed, which cicatrix is always depressed in the substance of the skin itself, and of which I have already related some examples.

From June to September this patient underwent various kinds of treatment for the spots, which continued stationary, or rather increased during this period; and early in October he placed himself under my care. At this time the spots were dark-brown discolourations, nearly circular, unaccompanied by pain, uneasiness, or inflammation of any kind, and did not disappear under pressure. He had evidently been submitted to a mercurial course, as there were two or three ulcers in the mouth; the gums were spongy, and bled from the slightest friction; and there was strong mercurial fetor of the breath.

I directed this gentleman to use the vapour twice a week, with half an ounce of the bisulphuret for each fumigation. He also took a tumbler of the compound decoction of guaiacum twice a day, with two drops of the liquor potassæ arsenitis.

The treatment was not varied; at the end of nine weeks the spots could not be perceived, and the general health had much improved.

This is a very rare form of constitutional venereal taint, and is to be distinguished from all other varieties of syphilitic disease of the skin. Cazenave[1] corroborates from his experience the rarity of its occurrence, and mentions cases in which it has been confounded with other cutaneous affections. These copper discolourations, however, of venereal origin, due to an altered condition of the pigment of the skin, almost invariably coexist with other symptoms, whose nature is more unequivocal. In the case just detailed, the previous history, the condition of the throat, and the loss of hair, leave no doubt as to the true nature of the disease. Syphilitic alterations in the colour of the skin (maculæ syphiliticæ) are rarely, if ever, ushered in or accompanied by that febrile action which is common at the commencement of the ordinary venereal eruptions; they are not accompanied by any other alteration of the skin beyond change of colour; there is neither inflammation, ulceration, nor desquamation.

These rare forms of disease are slow in their progress, and rebellious to all ordinary treatments: indeed, it is rare to find them cured at all under such circumstances. Cazenave quotes a case of this nature from Biett's practice, in which the patient's health was entirely destroyed by the means adopted to remove them, which, even in the hands of men of such ample experience, were unsuccessful. The case I have just detailed, of even aggravated form, for the spots on the face and back were as distinct and deep as though they had been painted on the skin, and completely banished the patient from society, was cured by the vapour in nine weeks, after five months' treatment by the ordinary remedies, during which time the spots rather increased than diminished, and the health was beginning to fail under the remedies employed.

Other forms of "maculæ," or discolourations, are less vivid, and do not even always attract the patient's attention, though they render some others very uneasy. It is common, during treatment for other venereal symptoms, to find, on undressing the patient, the surface of the abdomen, chest, or thighs covered with light, copper-coloured blotches, which are precisely of the same nature as those which I have just described. If the treatment by the vapour is being followed, they commonly, if not always, yield to it, though sometimes very slowly; but ordinary treatments, though pursued for months, appear to have little or no influence over them.

---

[1] 'Maladies Vénériennes de la Peau,' p. 575 et seq.

CASE LXXXV.

Constitutional syphilis of ten years' duration: periodical attacks of disease in the throat; affections of the nose and testis; at the end of nine years, an acute attack of disease in the throat, with speedy perforation of the soft palate; failure of mercurial and iodine treatments conducted in the ordinary manner; speedy and remarkable improvement of all the symptoms, and disappearance of many of them, under treatment by the vapour.

Mr C——, aged 23, consulted me, when passing through Birmingham in 1840, for a slight eruption and sore throat, which were both of syphilitic origin; he had had primary sores some months previously, for which he had taken mercury to salivation. I neither saw nor head from this patient for nine years; but, early in 1849, he again came to me. He stated that he had never been well since he first saw me; that from time to time he had had attacks of inflammation and ulceration of the throat, which had yielded to medicine (the hydriodate of potass), but had always recurred after the medicine had been discontinued for a little time. He had suffered also from discharges of hard, thick crusts from the nose; the nasal duct had been obstructed, and the operation for its restoration had been attempted and failed, and the patient suffered, consequently, from lachrymal fistula. He had enlargement and induration of the left testis; he was pale, emaciated and weak, and suffered from profuse night-sweats.

Such had been the condition of the patient during the nine years which had elapsed between his first and second visits to me. The immediate cause of the second consultation was the state of the throat. Four days only previous to this visit, he began to suffer from pain in the roof of the mouth, which was much inflamed; and, on the second morning after these symptoms had first been observed, he discovered a large hole in the roof of the mouth. The whole of the roof of the mouth and soft palate were at this period intensely and lividly red ; and at the junction of the soft with the hard palate, there existed an ulcer of the size of a sixpence, which had perforated the velum, and through which the nasal mucus flowed, as it was close under the posterior nares ; the ulcer was rapidly spreading, and threatened destruction to the whole of the contiguous parts. The pharynx and fauces presented no trace of inflammation.

Encouraged by the success which had attended the use of the fumigation in two other cases, I immediately proposed it to my patient, who was immersed in a powerful bath for half an hour, for which were used two drachms of the binoxide and two drachms of the bisulphuret of mercury. On the next day, the pain was gone, the ulcer had not extended, and the inflammation was certainly less. On the second and third days, the baths were repeated in the same manner, and of the same strength. The mouth had now become so sore that they could not be continued, although neither salivation nor ulceration was produced, merely an even redness and swelling of the gums.

The patient was directed to take twenty drops of Battley's solution of opium three times a day, with plenty of sarsaparilla broth.[1]

At the end of a fortnight, the testis had recovered its natural state ; the inflammation in the mouth had entirely disappeared, and the ulcer was granulating and contracting fast ; the mouth still continued sore.

At the end of two months, this patient did not present any symptom of constitutional taint ; the perforation in the palate remained, though it had much contracted, and did not occasion much inconvenience. There has been no fresh symptom for ten months.

This case is remarkable and instructive in many points, and forcibly illustrates certain laws in the history of secondary syphilis. It shows, in the first place, that acute and mutilating diseases not unfrequently occur in constitutions broken down by long-continued venereal taint. It shows, again, that the condition of the nose, and the nature of the discharges from it, are very frequently the chief symptoms that mark a latent venereal taint: this is a point which I have before had occasion to allude to, and it is one of very considerable importance. The treatment of this case illustrates the power of the moist mercurial fume in arresting formidable diseases of this nature, and arresting them so quickly, so certainly, and so safely. I do believe that no other plan of treatment could have been framed which would have saved the whole of the roof of the mouth from horrible mutilation.

---

[1] Decoct. sarsæ co., ℔ss ;
Carnis bovis, ℔ss.
Coque simul super lento igne ad dimidium.
Dose. Ad libitum.

This ulcer was evidently of nasal origin, and the velum had been perforated from behind; it had not been preceded by any ulceration in the throat, or on the fore part of the velum; and the first knowledge the patient had of the existence of the ulcer was the sight of the perforation in the palate. I repeat, that in all cases of secondary syphilis the passages of the nose should be carefully examined, as they furnish some of the best tests we can have of the existence of a latent constitutional taint. This patient has had no relapse. (June, 1860.)

Case LXXXVI.

Constitutional syphilis of three years' duration: discharge of crusts from the nose, with ulceration; great wasting of the body, with hoarseness, difficulty of swallowing, and pain in the larynx; local employment of the vapour of the binoxide of mercury; cure.

E. F——, aged 36, was admitted into the Queen's Hospital, under my care, early in 1849. She had been the subject of secondary and constitutional syphilis for about three years, during which time she had undergone a great variety of treatment. She was, at the period of her admission, much emaciated, had night perspirations, and could only speak in a whisper. She had superficial ulceration of the septum of the nose, the whole lining membrane of which was vividly red, with daily discharges of the characteristic crusts. Her chief complaint, however, was of pain deeply seated in the throat and neck; and the larynx was very tender when handled or pressed.

I suspected that she had syphilitic ulceration of the windpipe.

By means of an apparatus, easily contrived, a stream of the vapour, made with half a drachm of the binoxide of mercury for each fume, was directed into the fauces and up the nostrils every morning. After four or five inhalations, the mouth became sore, and the remedy was used less frequently.

The symptoms entirely disappeared under this treatment; and three months afterwards, when the patient called on me, she had recovered her health and strength, and appeared perfectly well.

I have, in many instances, employed the vapour of the binoxide, the iodide, and the grey oxide of mercury locally, in many anomalous symptoms, which were consequent upon protracted and constitutional syphilis, and which did not appear to require the general application of such remedies. These diseases have been, fissures and cracks in the tongue; pains in the throat, fauces, and larynx, which had previously been the seat of ulceration; fissures of the anus, cracks about the lips, &c. One of these cases I have just detailed, and I could bring forward a very considerable number, in almost all of which one remedy or the other has been perfectly successful. In cases where it is wished to employ the vapour of mercury locally to affections of the tongue, throat, or nose, it is better to use calomel or the grey oxide, as the iodide or the vapour of the bisulphuret produces so much sneezing and coughing, that some persons are unable to bear the application long enough to be useful.

Case LXXXVII.

Constitutional syphilis of four years' duration: treatment by the vapour; uneasiness and pain in the throat still recurring at times; local application of the vapour of the binoxide of mercury; disappearance of the symptoms; no relapse.

A commercial traveller placed himself under my care to be treated for secondary and constitutional syphilis, from which he had suffered for nearly four years.

The symptoms consisted in superficial ulceration of the throat, pains in the bones of the nose, with superficial ulceration of its mucous membrane, and discharge of pus, blood, and mucous crusts, with some suspicious spots on the skin, and a general cachectic condition, the result probably of large quantities of mercury which he had taken for the cure of the primary disease.

He was treated by the moist vapour of the bisulphuret and binoxide of mercury. In about ten weeks he had perfectly recovered; and at the end of three months had become very florid, and got very fat. There remained, however, some uneasiness in the throat, and from time to time a blush of redness spread over the pharynx and fauces, accompanied by dryness, and slight pain when he swallowed. These symptoms rendered him uneasy; but as they did not appear to me sufficiently important to condemn him a second time to a full course of treatment, I directed half a drachm of the vapour of the binoxide of mercury to be directed into the throat three times a week. Each application gave him great relief; at the end of three weeks the throat no longer troubled him, and for twelve months there has been no return of disease in any form.

It not unfrequently happens that a single symptom continues to annoy patients, when they do not present any appearance of general constitutional taint, and where the treatment previously adopted has been sufficient to render the mind pretty easy on such a point. These symptoms generally consist in periodical attacks of redness and dryness in the throat; in soreness and occasional discharge from the nose; in fissures and superficial ulceration of the tongue, and the interior of the mouth; in scaly, dry blotches on the palms of the hands and soles of the feet; and in pains deeply seated in the neck and throat. In all such cases, and I could bring forward instances of every form I have mentioned, a local treatment by the vapour almost invariably succeeds in removing the symptoms, which, I believe, in such cases, to be most commonly local, and where a general treatment is much more likely to do harm than good. I bring forward one or two cases in illustration.

LXXXVIII.

Constitutional syphilis of fifteen months' duration: removal of the symptoms under treatment by the vapour of the bisulphuret of mercury; subsequently fissure and red elevations upon the tongue; treatment locally by the vapour of the iodide; permanent and perfect cure.

A young gentleman who had been suffering from secondary and constitutional syphilis for about fifteen months, came under my care in the early part of 1848. He was treated methodically by the fumigations, and took in addition some decoction of guaiacum, with the syrup of iodide of iron, as he was of a weak and delicate constitution. About two months after the disappearance of any venereal taint, a long fissure or crack came in the tongue, and four or five large, red, hard elevations appeared, having the appearance of small strawberries; the tongue was red and painful. These symptoms appeared to me of venereal origin, although his health appeared good, and he presented no other appearance of taint.

I suggested to him the use of a local fumigation of the vapour of five grains of the iodide of mercury every other day. No other remedy was used; and in three weeks the fissure had closed, and the tongue presented its natural appearance.

I have seen several instances in which fissures, superficial ulcerations, or indurations, thickening, and unevenness of some parts of the tongue, have remained for years after the patient had been cured of all other symptoms of syphilitic taint; and, I believe, although these are occasionally dependent upon a general affection, they are, nevertheless, in many instances, local diseases only. They are almost always rendered worse by mercury given by the mouth, and probably are merely forms of chronic stomatitis, produced originally by the internal administration of this drug. It will easily be discovered whether they are symptoms of general infection, by the coexistence of some of the other symptoms, of which I have so frequently spoken. If the health be good, and such symptoms are absent, they are local diseases. They yield in a rapid manner to treatments by vapour, and the cures are generally permanent.

CASE LXXXIX.

Excavated ulcers of the throat; treatment internally by a full course of mercury; recurrence of the disease; a second course of mercury; a third attack of ulceration; complete and permanent cure by the vapour of the iodide of mercury.

S. P—— was treated by a full course of mercury internally for two deep ulcers of the throat, one situated on each tonsil, under which the ulcers healed. A short time afterwards the throat again ulcerated, and the patient was a second time submitted to a mercurial course, pushed to salivation; the ulcers again healed, but, in a short time, again broke out. The patient was, at this period, placed under my care. The health was a good deal broken by the two courses of mercury previously employed; the patient was thin and weak, and the appetite bad. I directed the patient to take the compound infusion of gentian, with dilute nitric acid, and some of the compound extract of sarsaparilla, with two grains of the extract of opium every night. The vapour of three grains of the iodide of mercury was also directed into the throat every other day. In eighteen days the ulcers had healed, and the patient has not again relapsed.

This is not a solitary case; I have seen a great number exactly similar, where ulcers which had healed under mercury, internally administered, have frequently again broken out, and have at length rapidly and permanently closed under treatment by the vapour. Of all local treatments to venereal ulcers of the throat, none are equal to the moist mercurial fume. Whether there be mere redness, the excavated ulcer, creeping or superficial ulcers, this is the local remedy *par excellence.*

Clara C——, a patient in the Queen's Hospital, had superficial ulceration, with much redness of the throat, and shining, copper-coloured blotches on the head and other parts. She had been treated by a long course of the bichloride of mercury, which had cured the skin disease; but the ulceration of the throat, although at times disappearing, kept constantly recurring. She had also two small ulcers of the tongue. Both the ulcers of the throat and tongue healed rapidly under the use of the vapour of the iodide, and the cure was permanent.

CASE XC.

Constitutional syphilis of seven years' duration; nocturnal pains, with enlargement and tenderness of the bones of the nose, and of the bones of the left arm; sarcocele of the left testis; failure of the ordinary treatments; complete cure by the Author's method in four months without relapse.

A dramatic artist of celebrity, who had been married for some years, and who had not had any primary venereal disease, in any shape or form, since his marriage, consulted me in the early part of 1849. He came to me as a forlorn hope, despairing of relief, as he had constantly relapsed after discontinuing the best-framed ordinary treatments, conducted by eminent surgeons, amongst whom may be mentioned the late Mr Aston Key. When I first saw this gentleman, his chief complaint was of the left fore-arm, the bones of which were much enlarged, very painful, and tender to the touch; but his sufferings were much increased during the night, when the pains were at times so excruciating as to deprive him more or less completely of rest; he had not slept one night, without pain, for seven years. The radius and ulna near the wrist were much enlarged, and were nodulated and uneven. The bones of the nose were a good deal thickened, and he had shooting pains in them. The left testis was five times the size of the right, heavy, and lobulated, but neither painful nor tender.

I considered this case as one of a decided venereal character; although mercury, pushed to salivation, and iodine had previously failed in affording more than a mere transient and temporary relief. Knowing the benefit which I have derived in many former cases from the use of the baths, I held out to my patient a hope that they might be serviceable to him also.

I directed him to use half an ounce of the bisulphuret of mercury and half a drachm of the iodide of mercury for each of the first three baths, which were to be taken every third day, and to take internally some small doses of the hydriodate of potass with colchicum.

After the third bath, which had slightly affected the mouth the nocturnal pains had disappeared, and the tenderness was gone from the arm; he could bear the bones pressed and handled, although previously they had been exquisitely tender. The treatment was conducted at intervals for three months; sometimes the baths were taken once a week, at other times not so frequently; the medicines also were continued. The pains never returned, and, at the end of the period I mention, the nose and testis had been long perfectly well.

This was a well-marked case of chronic syphilitic periostitis; the treatment of which, by my method, was rapid, safe, and successful. Perhaps no forms of constitutional syphilis are more formidable than those which are seated in the periosteum and bones; and such affections are very frequently due to exposure, neglect, or want of care during a mercurial course which has been prescribed for the cure of some form of secondary disease, but which not only frequently fails in curing it, but disposes the system to the production of new symptoms of a still more formidable character than those for which the remedies were originally prescribed. It has been said that the iodide of potassium is all but a specific for periosteal inflammation, more particularly that of syphilitic origin: it is certainly, in many cases, an excellent and efficient remedy; but there are many cases also in which it totally and completely fails: not so with the plan of treatment I am advocating; it is all but certain in its influence over such diseases, and the rapidity with which it cures is very remarkable.

The patient whose case I have just detailed was so convinced of the superiority of this method, that I could with difficulty prevent him sending the details of his case, and its treatment, to a Metropolitan daily paper. He had been under the best ordinary treatment for nearly seven years, with little or no benefit; and he was completely and permanently cured in three months. In such cases, I believe, after several experiments made on the subject, that the best remedies to employ are combinations of the bisulphuret and the iodide of mercury in the proportions, or nearly so, which I have mentioned in the details of the case.

The next case is equally remarkable in the effects of the remedies employed, although the duration of the disease was not by any means so long as the preceding; but still, in many respects, the symptoms were of an equally formidable character.

CASE XCI.

Secondary and constitutional disease of six months' duration, consisting in copper-coloured scaly blotches on the neck, pustules and tubercles on the face, thickening with tenderness of the bones of the right leg, and disease of the testis; failure of ordinary treatments; rapid and permanent cure by the vapour of the iodide and bisulphuret of mercury.

A young gentleman, aged 20, contracted gonorrhœa, and a primary sore, late in the autumn of 1848, for which he was treated by a surgeon in the North of England, where he resided. The primary diseases were apparently cured; but soon after the disappearance of the discharge from the urethra, a rash made its appearance all over the body (roseola syphilitica?), which soon died nearly, but not completely, away. Some time afterwards, blotches of a more decided character appeared on the neck and on the face, and he began to suffer from pains in the right leg, which were at times sufficiently severe to occasion lameness. About this time the patient became languid, and was troubled occasionally with profuse night perspirations. For these symptoms he took various medicines under the direction of experienced surgeons; and, about six months after the first appearance of the skin disease, he placed himself under my care.

When I first examined this gentleman, he presented a most formidable array of constitutional symptoms. On the face were forty or fifty pustules, with hard, nodular bases; and, in the substance of the left cheek, two tubercles, each as large as a horse-bean, and one on the back of the neck still larger, the surfaces of which were beginning to inflame. On the fore part of the neck were a number of copper-coloured scaly blotches of the size of a shilling; and the body generally was covered with a faint copper-coloured mottling, into which the first rash had subsided. The right testis was three times the size of the left, and the tibia of the right leg much enlarged, very painful at night, and tender to the touch: the patient had evidently taken mercury, for his gums were spongy, and the breath had a strong fetor; yet his disease had gradually progressed, and new symptoms were from time to time added to the old.

Formidable as the details of this case must appear, I felt certain of a speedy and permanent cure under the use of the moist vapour of the iodide of mercury in a short time. I directed a bath, with three drachms of the bisulphuret of mercury, and one of the iodide, to be administered every other day, with the head immersed, and to be continued for half an hour: the patient was ordered also to take freely of the compound decoction of guaiacum, with small doses of the iodide of potassium, and three grains of the acetic extract of colchicum and one of the extract of opium every night.

The first bath relieved the pains in the leg, and other parts; and, after the second, the tibia might be pressed without flinching; and the pains, except at such a time, were altogether gone: the hard bases of the tubercles, even at this early period, were less, and the tubercles softer. Very little medicine was taken in this case. The patient drank a cup of guaiacum-tea two or three times a day, in which were dissolved three grains of the iodide of potassium; and he took also a dose of opium at bed-time. Such remedies alone, and in such doses, would have exerted but little influence over so formidable a disease, and many of the symptoms could not have been expected to yield at all to such medicines. The cure was complete in five weeks, and it has been real and permanent; no relapse nor return of complaint in any form. The general health has been also, as it commonly is, much improved by the treatment.

In cases of complicated constitutional syphilis, such as the one just detailed, we cannot estimate too highly the plan of treatment by the moist mercurial fume. In such and similar cases the symptoms are so numerous and varied, that, in the ordinary way, we are almost at a loss to know what kind of internal treatment to recommend. No plan is laid down by authors of the greatest experience for cases like the present. In speaking of complicated syphilis, Ricord says, "We must treat the epiphenomenon of the disease, let it be whatever it may: the worst treatment is that which is exclusively directed towards the removal of one symptom, when ten others require modifications."

When the disease has been still further complicated by the internal administration of mercury, and we find fetor of the breath, with a spongy condition of the gums, and a certain amount of debility and *malaise*, with night perspirations, which commonly set in at these periods, the difficulties of treatment are much increased. In such states, a further internal treatment by mercury is inadmissible, and might even prove fatal; and iodine offers but little better prospect of success.

At these periods, and in such cases, the moist mercurial fume, employed in the manner and with the modifications I have already detailed, is all but certain in its effects. The patient soon begins to amend; the evils caused by the internal administration of mercury soon pass off; the appetite, strength, and general health rapidly improve, whilst the symptoms of constitutional taint are quickly and, in most cases, permanently eradicated.

FINIS.

INDEX.

- Abortive treatment of gonorrhœa, 63
  - Mr Gross on, 65
  - of chancre, 117
  - of bubo, 158
- Acid nitrate of mercury, *see* Liquor hydrargyri pernitratis
- Acton, Mr, on female discharges, 46
- Adenitis, 155
- Alopecia, 221
- Ancell, Mr, on syphilitic tuberculosis, 292
- Antimonial solution, 148
- Anus, abscesses in the vicinity of, occasionally due to gonorrhœa, 84
- Aromatic wine, 125
- Arsenic in the ulcerated forms of tubercle, 202

- Balanitis, 42
  - causes of, 44, 45
  - treatment of, 43
  - symptoms of, 45
  - complications of, 48, 49
  - occasional syphilitic orgin of, 46
  - secondary symptoms after, 46, 47
  - cases of, 45, 46, 47, 48
  - recurrence of, 52
  - question of operation in, when complicated with phymosis, 49
- Beer on gonorrhœal ophthalmia, 91
- Bennet, Dr James Henry, on vaginitis, 102
- Bennett, Dr Hughes, microscopic examination of the products of irritated and inflamed glands, 31
- Bertin on infantile syphilis, 308, 315
- Biett, M., on the treatment by the insufflation of the chloride of mercury, 327
- Bismuth, trisnitrate of, as an injection in gonorrhœa, 76
- Bladder, gonorrhœal diseases of, 84
  - chancre of, 136
- Blennorrhœa, 77
- Blisters in gleety discharges, 81
- Blood, pathology of, in constitutional syphilis, 197
- Bones, syphilitic diseases of, 281
  - nocturnal pains in, 281
  - treatment of, 281
- Bougie, recommended in the advanced stages of gonorrhœa, 83
  - in gleet, 80
- Bouisson, M., on syphilitic diseases of muscles, 280
- Brodie, Sir B., on mercurial treatment by friction, 18
- Bubo, its relation to the varieties of chancre, 130
  - anatomical relations, 131
  - virulent and non-virulent, succeeding to simple or soft chancres, 131
  - non-virulent bubo, 131
  - virulent bubo, 131, 160

- Bubo, indolent indurated, 132
  - varieties of, 155
  - primary, or bubon d'emblée, 156
  - inoculation of, 156
  - causes of, 157
  - abortive treatment of, 158
  - suppurating treatment of, 159
  - mode of puncturing, 160
  - open virulent, treatment of, 161
  - sloughing and chronic indolent, treatment of, 162
  - fistulæ and sinuses after, 165
  - secondary symptoms after, 165

- Cachexia, syphilitic, 292
- Caries, 281
- Carmichael, Mr, doctrines of, 2
- Causes of secondary syphilis, 172
- Caustics in the destruction of chancre, 119
  - when indicated, 121
  - not always successful in the destruction of a chancre, 121
  - objections to the use of, 121
  - when not to be used, 122
  - forms for, 120, 121
  - cautions in the use of, in diseases of the throat, 237
- Cazenave, M., on constitutional venereal ulcers, 216
- Ceeley, Mr, on the absorption of lymph, 117
- Cellular tissue, syphilitic tumours of, 218
- Chancre, 109
  - duality of, 109, 110
  - classification of, 110
  - soft, or non-indurated, 111
  - indurated, or infecting, 112
  - inoculation of, difficult, 114
  - experiments on, 114
  - mercurial treament of, 115
  - varieties in the appearance of, dependent on their situation, 116
  - varied seat of, 117
  - abortive treatment of, 118
  - when contra-indicated, 122
  - complications of, with phymosis, 123
  - diet in, 123
  - antiphlogistic treatment in, 124
- Chancre, mercury in, 124
  - local treatment of, 125
  - forms for local applications, 125
  - mild treatment recommended, 127
  - indurated, not to be destroyed by caustics, 129
  - the Author's treatment of, 129
  - persistent induration of the cicatrix of, 130
  - in the female, 151, 154
- Chancres of the urethra, 133
  - history of, symptoms of, 134
  - differential diagnosis of, 134
  - complications of, 135
  - cases of, 134, 136, 138, 139, 141
  - prognosis of, 136
  - consequences of, mutilations produced by, 137
  - constitutional symptoms produced by, 139
  - treatment of, 138
  - mercury in, 138
- Chancrous excoriation, 42
- Change in the form of mercurial remedy employed very frequently successful, 23
- Chlorate of potass in mercurial stomatitis, 24
- Chlorosis, syphilitic, 292
- Cicatrix of indurated chancre, persistent induration of, 130
- Clare's method of treatment, 326
- Classification of primary syphilitic ulcers, 110
- Colles, Dr, on the period of discontinuance of specific treatment, 24
- Condylomata, 224
  - primary forms of, 211
  - secondary, 211
  - treatment of the constitutional forms of, 217
- Congenital syphilis, 304
- Constitution, state of, to be watched during a mercurial course, 21
- Constitutional syphilis, 167
- Contagion, mediate, in syphilis and gonorrhœa, 56
- Contagious character of secondary syphilis, 34, 41, 175
- Copaiba, particular forms for its exhibition, 71
- Cubebæ piper, particular forms for the exhibition of, 72

Cubebs and copaiba, in gonorrhœal ophthalmia useless, 90
Cullerier, M., on the treatment of primary syphilitic ulcers, 127
  on syphilis in nurses and infants, 309
Cura famis, 4
Curling, Mr, on gonorrhœal orchitis, 93

De Méric, Mr, account of some modern doctrines on syphilis, 109
Decoctions of Feltz, of Zittman, 201
D'Espine, M., on gonorrhœal orchitis, 95
Desruelles, conclusions on treatment from the examination of 8,810 cases, 11, 25
Diagnosis of primary syphilitic ulcers, 116
  of secondary syphilis, 186
Diday, M., on the contagious properties of the blood in secondary syphilis, 197
  on infantile syphilis, 299
Diet in syphilis, 4
  cases illustrative of the varied effects of, 5, 6
  in secondary syphilis, 171
Discharges from the female which produce disease in the male of various kinds, 103
Dzondi's method of treatment, 327

Ear, syphilitic diseases of, 243
Egan, Dr, on inoculation, 31
  on bubo, 157
Epididymis, inflammation of, 92
Erythema, papulous syphilitic, 199
Exanthemata, syphilitic, 199
Excrescences, syphilitic, 224

Fauces, secondary syphilitic ulcerations of, 232
  mode of examining, 233
Faye, Dr, on inoculation, 29
Female, chancres and ulcers in, 151
Ferri perchloridi liquor, ferri pernitratis liquor, in gleet, 73
Fistulæ, 165
France, Mr, on gonorrhœal ophthalmia, 88
Fricke, on the urethral plug in some forms of gonorrhœa, 77

Gaussail, M., on gonorrhœal orchitis, 95
Generative organs, general weakness and irritability of, after gonorrhœa, 100
Glans penis, inflammation of, 42
Gleet, its nature, local symptoms of, 77
  constitutional effect of, and influence on virility, 78
  treatment of some inflammatory forms of, 79
  injections in, mode of using, 80
  bougies, blisters, internal remedies, 80, 81
  surgical operations in, when complicated with stricture, 81
Gonorrhœa, external or false, 42
Gonorrhœa, 53
  varieties of, 53
  nature of, 53
  produced occasionally by healthy females, 56
  dependent sometimes on an irritable stricture, or an irritable urethra, 54, 56
  illustrative case of, 55
  a disease distinct from chancre, 55
  causes of, 56
  pathology of, 59
  symptoms of, 60
  differential diagnosis of, 62
  the four stages of—first stage of, 62
  abortive treatment of, how to be employed, 63
  strong injections of nitrate of silver condemned—fatal case from the use of, 64
  second and third stages of, 62, 65
  antiphlogistic treatment of, more than an urethritis, 68
  alkaline treatment of, 66, 67
  revulsive treatment of, 68
  specific remedies in—copaiba, 69
  piper cubebæ, 72
  various remedies in, 71, 73

Gonorrhœa, injections in, how to be employed, 73, 74
    injections, various, forms for, 75, 76
    urethral plug in chronic gonorrhœa, 77
    secondary symptoms from, their nature, illustrative cases of, 86
    ill-effects occasionally due to the sudden or partial arrest of, 84
    treatment of such symptoms, accidents, 85
    retention of urine from suppression of, 85
    use of the catheter, 86
    rheumatism from, its two kinds, 86, 87
    ophthalmia from, 87
    its causes, general treatment, local treatment, 87
    cubebs and copaiba in, mercury in, restoration of the urethral discharge in, 90
    iritis from, 91
    swelled testicle from, 92
    pathology of, 93
    at what period it occurs, 94
    causes of, 94
    differential diagnosis of, 95
    treatment of, 97
    strapping in, 98
    enlargement of the testis from, 99
    weakness and irritability of the sexual organs from, 100
    of the rectum, 101
    in the female, seat of, pathology of, 102, 103, 107
    varieties of, 103
    speculum in, 105
    internal treatment of, local treatment of, 105
    complications of differential diagnosis of, 103, 107
    difficulties in treatment, 108
Grassi, M., on the state of the blood in constitutional syphilis, 197
Hair, loss of, from syphilitic causes, 221
    remedies for the restoration of, 222
Hamilton, Mr, on the syphilitic testicle, 273
Hunt, Mr, on the mercurial treatment of syphilis, 18

Indurated chancres, treated by moist fumigation, 129
Indurated cicatrix, 130
Induration of a primary sore, what it is, what is to be understood by it, 14
Infantile syphilis, 296
    causes of, 296
Infants, primary syphilis in, 308
    constitutional syphilis in, 310
    symptoms of, 310
    period of the appearance of a constitutional taint in, 312
    treatment of indirect, direct, 317
Injections, forms for, in gonorrhœa in the female, 105, 106
    in the male, 75, 76
Inoculation, 27
    of primary sores, 27
    of bubo, 30
    why frequently uncertain in bubo, 30
    in gonorrhœa, 33, 34
    in sympathetic bubo, 32
    in secondary syphilis, 34
    Report of the Imperial Academy of Medicine on, in secondary syphilis, 34, 38
Integuments, various conditions of, in open bubo, 160
Iodide of potassium, its use in the treatment of syphilis—inert in primary diseases—when most useful, 331
    frequently suspends symptoms, but does not cure disease, 332
    its combination with mercury, 333
    its use and dose as a tonic and prophylactic, its use and dose as an anti-syphilitic, 333
Iodide of sodium, its use and administration in secondary syphilis, 334

Iodide of iron, 335
Iodide of ammonium, 336
Iodine, tincture of, in chronic vaginitis, 106
Iritis, gonorrhœal, 91
Iron, potassio-tartrate, in primary syphilis, 12
  in phagedena, 145
Irrigation in phagedena, 146
Itch, venereal, 211

Johnson, H. J., on nitrate of silver injections, 65

Lacrymal passages, syphilitic diseases of, 241
Lalouette on fumigations, 19
Larynx, syphilitic diseases of the, 251
Lee, Mr H., on the microscopic appearance of the secretions from primary syphilitic ulcers, 16
Leucorrhœa occasionally produces urethritis in the male, 57
  also balanitis, 46
  also superficial ulceration, 48
  Dr Tyler Smith on, 103
Liquor hydrargyri pernitratis, 107
Lungs, syphilitic diseases of, 292

Maculæ, 215
Mercurial treatment of syphilis, 13
Mercurial vapour bath, 319
  in alopecia, 222
  in primary syphilitic sores, 19, 115
  in secondary syphilis, 183
  in tubercles of the face, 191
  in syphilitic rashes, 200
  in syphilitic scaly diseases, 202
  in syphilitic pustules, 208
  in syphilitic tubercles, 214
  in syphilitic stains, or marks in the skin, 216
  in the secondary condylomata, 231
  in ulcerations of the throat, pharynx, and fauces, 238, 258
Mercurial vapour bath in diseases of the testis, 353
  in pains in the bones, 282
  description of, 310
  preparations used in, 320
  diet in—curative effects of, 321
  time under treatment by, 322
  effects of, on the general health, 328
Mercury, chloride of, its use in the treatment of syphilis, 325
  bichloride, its use in the treatment of syphilis, 327
  iodide of, 328
  biniodide of, 329
  bicyanide of, 330
  when indicated in the treatment of syphilis, 14
  when not to be used, 14
  in what manner to be used, 17
  by internal administration,
  by friction, 18
  by moist fumigation, 19, 20
  internal remedies to be used with the treatment by fumigation, 20
  when to be discontinued, 23
  when to be used in the primary syphilitic ulcer, 124
Metamorphoses of syphilis, 189
Milton, Mr, on the use of the preparations of potass in gonorrhœa, 67
Modern history of syphilis, 1
Mouth, state of, to be examined before giving mercury, 25
  and during its employment, 25
  secondary syphilitic ulcerations of, 232
Muscles, syphilitic diseases of, 279

Nails, syphilitic diseases of, 223
Nantes, opinions of the surgeons of, on the non-mercurial treatment of syphilis, 11
Nasal fossæ, secondary syphilitic diseases of, 239

Naso-lacrymal canal frequently obliterated in secondary syphilitic diseases of the nasal fossæ, 242
Nocturnal pains, 281
Nodes, 284
  causes of, 284
  pathology of, 285
  terminations of, 286
  situations of, 285
  differential diagnosis of the, 287
  prognosis of—treatment of, 288
  comparative effects of mercury and iodine in, 288
  local treatment of, 249
  operative procedures in the, 283
Nodosities, white, of the tendons, 279
Non-mercurial treatment of syphilis, 1
Nostrils, syphilitic diseases of the, 239
Nurses, wet, should be examined before their admission into families, 41
  syphilis in, 296

Œsophagus, syphilitic ulceration of, 235
  syphilitic stricture of, 236
Onyxis, 223
Ophthalmia, gonorrhœal, 87
Opium, a valuable remedy in many forms of syphilis, 338
Ostitis, 281
Ovaries, gonorrhœal inflammation of, 108

Paget, Mr, on constitutional venereal ulcers, 216
Pains, syphilitic, in the bones—nature and pathology of, 281
  treatment of, by internal remedies—by the mercurial vapour bath—by operation—illustrative case of the latter, 283
  frequent failure of the iodide of potassium in, 289
Papulæ, general account of—varieties of—treatment of, 211
Papular syphilis, 211
Parker, Mr Langston, on painful affections of bone, 281
Periostitis, 281
Phagedena, 144
  a condition commonly and frequently assumed by soft chancres, 144
  its nature and varieties, 144
  causes, 145
  treatment, locally and constitutionally, 146
  secondary, 148
  ulcerative, moist fumigation in, 21, 145, 147, 150
  causes of, 144
Pharynx, secondary syphilitic ulceration of, 233
Phymosis from balanitis, question of operation for, considered, 49
  from primary syphilitic ulcers, 123
Plenck, liquor ad condylomata, 231
Pregnant women, on syphilis in, 296
  treatment of, 314, 315
Prognosis of constitutional syphilis, 194
Pustulæ, syphilitic, 205
  history of, 205
  course of—varieties of, 206
  consequences of, 207
  complications of, 208
  treatment to be modified to suit the age and constitution of the patient, and the particular form of disease, 208
  local dressings to ulcers succeeding the syphilitic pustule, 209
  use of opium in some forms of, 210
Pustular syphilis, 205

Rectum, gonorrhœal diseases of, 101
  syphilitic disease of, 190
Rheumatism, gonorrhœal, its two kinds, 86
Richter on gonorrhœal ophthalmia, 88
Ricord, M., on the period of discontinuing specific treatment, 23
  on inoculation, 27
  on chancres of the bladder, 136
  on the abortive treatment of chancre, 118

Ricord, M., on the diagnosis of bubo, 157
Roe, Dr, non-mercurial treatment, as practised by, 8
Rose, Mr, treatment of syphilis without mercury, 3
Roseola syphilitica, 199

Salivation not necessary to the cure of syphilis, 23
    chlorate of potass as a remedy for, 24
Sarcocele, syphilitic simple, 272
    tubercular, 274
    fungoid, 275
Sarsaparilla, cold infusion of, 233
Scabies venerea, 211
Scaly venereal disease, 200
Scarpa on gonorrhœal ophthalmia, 88
Secondary syphilis, cases illustrating its occasionally contagious character, 38, 39, 40, 176
    local circumstances necessary to contagion, 40. *See* Syphilis, secondary
Secretions, natural, from a healthy female, sometimes produce urethritis in the male, 56
Semen, secondary syphilis produced by, 177
Sigmund, Professor, on mercurial inunction, 19
Skey on gonorrhœa, 65
Skin, syphilitic diseases of, 199
    classification of, 199
    syphilitic stains of, 215
    syphilitic tumours of, 218
    appendages of—syphilitic diseases of, 221
Simple, or non-mercurial treatment of syphilis, 1
    in what the simple plan consists, 10
    in what kind of primary ulcer to be employed, 11
    not always successful, 10
    when to be abandoned, 11
Sinuses, treatment of, 165
Smith, Dr Tyler, microscopic anatomy of the neck of the uterus, 104
Soaps, mercurial, 222
Sore, condition of, to be frequently examined during a mercurial course, 21, 22
Speculum, cautions in the use of, 105
Squamæ, syphilitic, 200
    history of—varieties of diagnosis of, 201
    treatment of, 202
Stains on the skin, syphilitic, 215
Sudorifics, 336
Syphilida, 199
Syphilis, modern history of, 1
    primary, 109. *See* Chancres
    simple, or non-mercurial treatment of, 1, 12
    ferruginous treatment of, 12
    mercurial treatment of, 13, 26
    secondary, 167
    phases of, 167
    prevention of, 169
    complications of, 170
    causes of, 172
    primary ulcers and discharges from the urethra—causes, 172
    cases illustrative of the operation of this class of causes, 173, 174
    contagion a cause, 175
    hereditary transmission a cause, 179
    the treatment of the primary disease a cause, 169
    administration of mercury at improper periods a cause, 179
    incomplete treatment a cause, 182
    neglect of baths a cause, 183
    peculiarity of constitution, a habit of body, syphilitic temperament, a cause, 169, 184
    diagnosis of, 186
    its difficulties, 186
    illustrative cases, 187, 189, 190, 191
    prognosis of, 194
    state of the blood in, 197
    particular symptoms of, 199
    tertiary, 168
    nature of—pathology of, 168

Tannin in vaginitis, 106
Temperament, syphilitic, 169
Tendons, syphilitic diseases of, nodes on, 280
Tertiary syphilis, 168
Testes, gonorrhœal diseases of, 92

- Testes, abnormal positions of, 95, 96
  - strapping of, in gonorrhœal orchitis, 98, 99
  - chronic enlargement of, 99
  - syphilitic diseases of, 271
  - symptoms, diagnosis of, 271
  - pathology of, 273
  - condition of virility in, 277
  - treatment of, 277
- Throat, mode of examining, 233
  - secondary syphilitic ulcers of, 233
    - varieties of, 234
    - local treatment of, 237
    - constitutional treatment of, 237, 238
- Tongue, secondary syphilitic diseases of, 245
  - iodic diseases of, 245
  - mercurial diseases of the, 245
- Tracheotomy in syphilitic diseases of the larynx, 257, 258
- Treatment, local, of primary syphilis, 125, 128
- Tubercles, mucous, 212
- Tubercula, 212
  - general description of, varieties of, course of, 212
- Tumours, syphilitic, of the skin and cellular tissue, 218
  - of muscles, 219

- Ulcers, primary syphilitic, 109. *See* Chancre
  - classification of, 110
  - diagnosis of, 116
  - question of their locality considered, 117
  - their varied aspect dependent on situation, 116
  - abortive treatment of, by escharotics, 118
  - the Author's views on escharotics in, 120
  - how to be employed, 120
  - when indicated, 121
  - complicated with phymosis—with inflammation, 123
  - mercury in, when to be used, 115
  - local treatment of the second stage of, 125
  - local applications to, formulæ for, 125
- Ulcers, primary, in the female, 151
  - situations of, 151
  - cases of, 152
  - constitutional, or secondary venereal, 216
  - of mucous membranes, 232
- Urethra, discharges from the, of various kinds, 53
  - alterations in the, natural elasticity of, an occasional consequence of gonorrhœa, 83
  - stricture of, 83
  - chancres of, 133
  - perforations of, 137
- Urethral discharge, question of its restoration in gonorrhœal ophthalmia, 90
- Urethritis in the male, 53
  - in the female, 102
- Urine, retention of, from gonorrhœa, 85
- Uterus, gonorrhœal affections of the, 103
  - primary syphilitic diseases of, 151
  - secondary syphilitic diseases of, 260
  - symptoms of—pathology of, 261
  - influence of, on the ovum or fœtus, 266
  - treatment of, 268

- Vaginitis, 105
- Vegetable decoctions and infusions, 336
- Vegetations. *See* Warts, 224
- Venereal ulcers in the female, 151
- Vesicles on the penis, 204
- Vesiculæ, syphilitic, 203
  - diagnosis of, 204
- Vidal (de Cassis) on balanitis, 42
  - on nitrate of silver injections, 65
  - on gonorrhœal affections of the ovaries, 108
  - on chancres of the bladder, 136
- Vincent, Mr, on urethral discharges, 54
- Virility, to what extent affected, in syphilitic diseases of the testis, 277
  - in gleet, 78
- Virus, syphilitic, destruction of the, 127

Wallace, Dr, on balanitis, 42
    on inoculation in secondary syphilis, 74
Waller, M., of Prague, experiments on the inoculation of secondary syphilis, 41
Warts, syphilitic, 224
    their situation, causes, 224
    varieties, 225
    secondary forms of, 226
    contagious character of, 227
    local treatment of, 228
Warts, constitutional treatment of, 230
Whitehead, Mr, on the contagion of secondary syphilis, 41
    on the communicability of leucorrhœal discharges, 58
    on the seat of gonorrhœa in the female, 108

Zittman, decoction of, 337

INDEX TO CASES.

CASE PAGE

I.—Illustrates the effects of diet in the treament of syphilis . 5

II.— Ditto ditto . . 6

III.—Illustrates the occasional contagious character of secondary syphilis 38

IV.— Ditto ditto . . 38

V.—Shows that when a primary disease is communicated, the secondary diseases which follow it are different in each case 39

VI.—Gangrene of the prepuce due to the occlusion of the perpetual opening from balanitis . . . 45

VII.—Shows that balanitis, with thickening of the prepuce, without ulceration, may be followed by constitutional taint 46

VIII.—A similar case; balanitis without ulceration, secondary symptoms following 47

IX.—Balanitis occasionally produced by discharges from the vagina which are not specific 47

X.—Discharges from the male urethra, after promiscuous intercourse, not always specific . . . 55

XI.—Death from the injudicious use of strong injections of the nitrate of silver at the onset of gonorrhœa . . 64

XII.—Profuse muco-purulent gleet of two years' duration; failure of ordinary remedies; cure by a surgical operation 81

XIII.—Remarkable case of chancre of the urethra, with constitutional disease 139

XIV.—Illustrates the effects of chancres of the urethra in producing contraction and stricture of this canal . . 141

XV.—Illustrates the use of the mercurial vapour bath in arresting the spread of ulcerative phagedena, after the failure of ordinary treatment 149

CASE PAGE

XVI.—Cure of phagedena by the mercurial vapour bath, after the failure of ordinary treatment . . . 143

XVII.—Example of secondary diseases succeeding to urethral discharges; question of the nature of these discharges—urethral chancre? 173

XVIII.— Ditto ditto . . 174

XIX.—Illustrates the occasionally contagious character of secondary syphilis; communication of secondary disease to a healthy person without a primary sore . 176

XX.—A similar case; communication of constitutional disease from a tainted husband to a healthy wife . . 177

XXI.—A healthy wife diseased by her husband without evident symptoms on his part, probably by means of the semen; no pregnancy 178

XXII.—A similar case 178

XXIII.—Illustrates the difficulties sometimes met with in determining the character of a symptom supposed to be syphilitic 187

XXIV.—Ulcerating syphilitic tubercle of the lip and nose resembling lupus; cure by the mercurial fume, &c. . 189

XXV.—Illustrates the metamorphoses of syphilis; localised constitutional syphilis, simulating schirrous mamma . 190

XXVI.—Localised secondary syphilis, simulating fissure, or ulcer of the rectum 190

XXVII.—Chronic disease of the throat, simulating laryngeal phthisis, with ulcerating tubercles; cure by the mercurial vapour bath 191

XXVIII.—Examples of hereditary syphilis 196

XXIX.—Illustrates the diagnosis of secondary vesicular syphilis . 204

XXX.—Syphilitic ecthyma; illustrations of the use of opium in syphilitic cachexia 209

XXXI.—Illustrates the treatment of complicated secondary syphilis, with tubercles 214

XXXII.—Secondary syphilitic ulcers and caries of the bones after eight years' apparently good health . . . 216

XXXIII.—Stricture of œsophagus produced by the cicatrix of a secondary phagedenic ulcer 235

XXXIV.—Illustrates secondary syphilitic diseases of the lacrymal passages; obliteration of the nasal duct by syphilitic periostitis of the superior maxillary bone . . 242

XXXV.—Illustrates secondary syphilitic diseases of the tongue; secondary syphilis of the tongue, resembling cancer . 248

XXXVI.—Illustrates the effect which a change in the form of mercurial employed has upon some symptoms of secondary syphilis; secondary syphilitic ulcer of the tongue, appearing during a mercurial course, cured by a change to another form of mercurial remedy . .

CASE PAGE
XXXVII.—Dissection of a case of ulceration of the larynx and chancre of the urethra 252
XXXVIII.—Syphilitic disease of the cartilages of the larynx; destruction of the cricoid cartilage by ulceration; dissection of this case, and clinical remarks on secondary syphilitic diseases of the mucous membrane of the windpipe and cartilages of the larynx; symptoms, pathology, complications, and treatment . . 253
XXXIX.—Fungoid syphilitic sarcocele; cure by mercurials and the iodide of potassium 276
XL.—Syphilitic tumour of the muscles 279
XLI.—Nocturnal pains for ten years; suspension of the disease only by iodide of potassium; cure by mercurial vapour 282
XLII.—Caries of the tibia, with severe pains; failure of ordinary treatment; cure by trephining 283
XLIII.—Node of the right temporal fossa; two attacks of hemiplegia; cure by blisters, calomel, and opium, with hydriodate of potass 286
XLIV.—Syphilitic ulceration of the windpipe; cure by the mercurial fume locally applied 294
XLV.—Infantile syphilis; influence of the father on a diseased infant 297
XLVI.— Ditto ditto 297
XLVII.—A diseased father cured; healthy children born after the cure 299
XLVIII.—Communication of constitutional syphilis in the latent state from the husband to the wife, with pregnancy . 300
XLIX.— Ditto ditto 301
L.— Ditto ditto, without pregnancy . 303
LI.—Infantile syphilis; separate influence of the mother on its production 304
LII.— Ditto ditto the disease communicated to the mother by a nursling 305
LIII.— Ditto ditto ditto 305
LIV.—Latent syphilis in the father; no disease in the mother; six diseased children 314

CASES AND CLINICAL OBSERVATIONS ILLUSTRATIVE OF THE TREATMENT OF SYPHILIS BY MERCURIAL VAPOUR, AND OTHER REMEDIES.

LV.—Secondary phagedena of the throat; use of the mercurial vapour bath 341
LVI.—Protracted and severe nocturnal pains; failure of the iodide of potassium; cure by the mercurial vapour bath 342

CASE PAGE
LVII.—Constitutional symptoms of twenty-four years' standing; prolonged use by the iodide of potassium; great relief from the mercurial vapour bath . . 343
LVIII.—Case of syphilitic ecthyma; cure by mercurial vapour . 344
LIX.—Constitutional syphilis of seven years' duration; failure of the iodide of potassium and ordinary mercurial treatment; cure by the mercurial vapour bath and the biniodide of mercury 345
LX.—Constitutional syphilis, with bad health, for seven years; failure of ordinary iodine and mercurial treatments; cure by the mercurial vapour bath and the biniodide of mercury 346
LXI.—Constitutional syphilis for two years; failure of various remedies; cure by the mercurial vapour bath, without internal medicines 347
LXII.—Constitutional syphilis for eighteen months; partial amendment only by ordinary treatments; cure by mercurial vapour 348
LXIII.—Primary and secondary syphilis; co-existing inability to bear mercury; disappearance of all the symptoms under treatment by the mercurial vapour bath . 349
LXIV.—Secondary phagedena; clinical remarks on its treatment 349
LXV.—Nodes on the forehead; cure by mercurial vapour; clinical remarks on loss of hair and other symptoms of constitutional syphilis 350
LXVI.—Primary phagedena of the glans penis and urethra; clinical remarks 352
LXVII.—Syphilitic sarcocele; clinical remarks on treatment . 353
LXVIII.—Indurated primary sore; pustular secondary syphilis; bad health; cure by the mercurial vapour bath, opium, and decoctions of the woods . . . 354
LXIX.—Pustular secondary syphilis; nocturnal pains; bad health; use of the vapour; clinical remarks . . 355
LXX.—Severe nocturnal pains; clinical remarks on protracted syphilitic symptoms 356
LXXI.—Scaly peeling of the palms of the hands . . 357
LXXII.—Scaly peeling of the hands; scaly disease of the nails; loss of the hair, eyebrows, and whiskers; cure by the mercurial vapour bath; clinical remarks . . 358
LXXIII.—Induration of the cicatrix; clinical observations on the treatment of indurations 359
LXXIV.—Formidable symptoms of constitutional syphilis; failure of ordinary mercurial treatments, twice pursued; cure by the mercurial vapour bath; clinical remarks on the frequent failure of mercurial treatments, as commonly conducted 360

CASE PAGE
LXXV.—Superficial ulceration of the throat and nose; failure of ordinary mercurial treatment 362
LXXVI.—Syphilitic cachexia; severe nocturnal pains; cure by the mercurial vapour bath and opium . . . 362
LXXVII.—Superficial primary sore; for constitutional symptoms, spots on the body, loss of hair and voice; clinical remarks on the secondary diseases which succeed to superficial primary ones 365
LXXVIII.—Ulceration of the nasal fossæ 366
LXXIX.— Ditto ditto 368
LXXX.—Chronic disease of the throat; failure of ordinary treatment; cure by the mercurial vapour bath; clinical remarks on the success of this treatment, when associated with varied external remedies, which have, before such combination, been unsuccessful . . 369
LXXXI.—Superficial primary sores; great enlargement of the glands in the groin 369
LXXXII.—Indurated cicatrix; failure of ordinary treatment; cure by the mercurial vapour bath; clinical remarks . 371
LXXXIII.—Constitutional syphilis for two years; sarcocele; disease of the nasal fossæ; obliteration of the naso-lacrymal canal; clinical remarks 372
LXXXIV.—Constitutional syphilis stationary for six years; speedy cure by the mercurial vapour bath; clinical remarks on syphilitic stains of the skin . . . 375
LXXXV.—Constitutional syphilis for ten years; disease suspended, not cured, by the iodide of potassium; clinical remarks 377
LXXXVI.—Local employment of the vapour by the binoxide of mercury in diseases of the throat and nose . . 379
LXXXVII.—Clinical remarks on the local use of the vapours of mercury 380
LXXXVIII.—Secondary syphilitic disease of the tongue; local employment of the vapour of the iodide of mercury . 381
LXXXIX.—Recurrent secondary syphilitic ulcerations of the throat; permanent cure by the local application of the vapour of mercury 382
XC.—Nocturnal pains for seven years; failure of ordinary treatments; cure by the mercurial vapour bath; clinical remarks on diseases of the periosteum and bones . 383
XCI.—Tubercular secondary syphilis; cure by the vapours of the iodide and bisulphuret of mercury; clinical remarks on complicated secondary syphilis . . 385

M'GOWAN AND DANKS,
16 GREAT WINDMILL STREET,
HAYMARKET.

London, *New Burlington Street*,
October, 1860.

MR. CHURCHILL'S
Publications,
IN
MEDICINE, SURGERY,
AND
SCIENCE.

"It would be unjust to conclude this notice without saying a few words in favour of Mr. Churchill, from whom the profession is receiving, it may be truly said, the most beautiful series of Illustrated Medical Works which has ever been published."—*Lancet.*

"All the publications of Mr. Churchill are prepared with so much taste and neatness, that it is superfluous to speak of them in terms of commendation."—*Edinburgh Medical and Surgical Journal.*

"No one is more distinguished for the elegance and *recherché* style of his publications than Mr. Churchill."—*Provincial Medical Journal.*

"Mr. Churchill's publications are very handsomely got up: the engravings are remarkably well executed."—*Dublin Medical Press.*

"The typography, illustrations, and getting up are, in all Mr. Churchill's publications, most beautiful."—*Monthly Journal of Medical Science.*

"Mr. Churchill's illustrated works are among the best that emanate from the Medical Press."—*Medical Times.*

"We have before called the attention of both students and practitioners to the great advantage which Mr. Churchill has conferred on the profession, in the issue, at such a moderate cost, of works so highly creditable in point of artistic execution and scientific merit."—*Dublin Quarterly Journal.*

Mr. Churchill is the Publisher of the following Periodicals, offering to Authors a wide extent of Literary Announcement, and a Medium of Advertisement, addressed to all Classes of the Profession. Communications, Books for Review, addressed to the respective Editors, are received and duly forwarded by Mr. Churchill.

THE BRITISH AND FOREIGN MEDICO-CHIRURGICAL REVIEW;
OR,
QUARTERLY JOURNAL OF PRACTICAL MEDICINE.

Price Six Shillings. Nos. I. to LII.

THE QUARTERLY JOURNAL OF MICROSCOPICAL SCIENCE.

Edited by Edwin Lankester, M.D., F.R.S., F.L.S., and George Busk, F.R.C.S.E., F.R.S., F.L.S. Price 4*s.* Nos. I. to XXXIII.

THE MEDICAL TIMES AND GAZETTE.

Published Weekly, price Sevenpence, or Stamped, Eightpence.
Annual Subscription, £1. 10*s.*, or Stamped, £1. 14*s.* 8*d.*, and regularly forwarded to all parts of the Kingdom.

The Medical Times and Gazette is favoured with an amount of Literary and Scientific support which enables it to reflect fully the progress of Medical Science, and insure for it a character, an influence, and a circulation possessed at the present time by no Medical Periodical.

THE HALF-YEARLY ABSTRACT OF THE MEDICAL SCIENCES.

Being a Digest of the Contents of the principal British and Continental Medical Works; together with a Critical Report of the Progress of Medicine and the Collateral Sciences. Edited by W. H. Ranking, M.D., Cantab., and C. B. Radcliffe, M.D., Lond. Post 8vo. cloth, 6*s.* 6*d.* Vols. I. to XXXI.

THE JOURNAL OF PSYCHOLOGICAL MEDICINE AND MENTAL PATHOLOGY.

Being a Quarterly Review of Medical Jurisprudence and Insanity. Edited by Forbes Winslow, M.D. Price 3*s.* 6*d.* Nos. I. to XX. *New Series.*

THE PHARMACEUTICAL JOURNAL.

EDITED BY JACOB BELL, F.L.S., M.R.I.

New Series. Published Monthly, price One Shilling.

⁂ Vols. I. to XVIII., bound in cloth, price 12*s.* 6*d.* each.

THE BRITISH JOURNAL OF DENTAL SCIENCE.

Published Monthly, price One Shilling. Nos. I. to L.

THE DUBLIN MEDICAL PRESS.

Published Weekly, Stamped, price Sixpence, free to any part of the Empire.

THE LONDON AND PROVINCIAL MEDICAL DIRECTORY.

Published Annually. 12mo. cloth, 8*s.* 6*d.*

A CLASSIFIED INDEX

TO

MR. CHURCHILL'S CATALOGUE.

ANATOMY.

PAGE
Anatomical Remembrancer .. 3
Beale on Liver 5
Hassall's Micros. Anatomy .. 14
Holden's Human Osteology .. 15
Do. on Dissections 15
Jones' and Sieveking's Pathological Anatomy 17
Maclise's Surgical Anatomy .. 19
Paget's Catalogue 21
Sibson's Medical Anatomy .. 25
Waters' Anatomy of Lung .. 29
Wheeler's Handbook 30
Wilson's Anatomy 30

CHEMISTRY.

Abel & Bloxam's Handbook .. 3
Bowman's Practical Chemistry 7
Do. Medical do. .. 7
Fownes' Manual of Chemistry .. 12
Do. Actonian Prize 12
Do. Qualitative Analysis .. 12
Fresenius' Chemical Analysis .. 12
Galloway's First Step 12
Do. Analysis 12
Griffiths' Four Seasons 13
Horsley's Chem. Philosophy .. 16
Jones.—Mulder on Wine 17
Odling's Practical Chemistry .. 21
Plattner on Blowpipe 22
Speer's Pathol. Chemistry .. 26

CLIMATE.

Barker on Worthing 4
Francis on Change of Climate .. 12
Hall on Torquay 14
Haviland on Climate 14
Lee on Climate 18
McClelland on Bengal 19
Martin (J. R.) on Tropical .. 20

DEFORMITIES, &c.

Bigg on Deformities 6
Bishop on Deformities 6
Do. Articulate Sounds .. 6
Brodhurst on Spine 7
Do. on Clubfoot 7
Godfrey on Spine 13
Hare on Spine 14
Hugman on Hip Joint 16
Inman on Myalgia 16
Tamplin on Spine 26

DENTISTRY.

Clark's Odontalgist 9
Gray on the Teeth 13
Odontological Soc. Transactions 21
Tomes' Dental Surgery 28

DISEASES of the URINARY and GENERATIVE ORGANS, and SYPHILIS.

PAGE
Acton on Urinary Organs .. 7
Do. on Reproductive Organs 3
Coote on Syphilis 10
Coulson on Bladder 10
Do. on Lithotomy 10
Egan on Syphilis 11
Gant on Bladder 13
Judd on Syphilis 17
Maunder on Chancre 20
Milton on Gonorrhœa 20
Parker on Syphilis 21
Wilson on Syphilis 31

DISEASES OF WOMEN AND CHILDREN.

Ballard on Infants and Mothers 4
Barker on Children 4
Bennet on Uterus 5
Do. on Uterine Pathology .. 5
Bird on Children 6
Brown on Women 7
Do. on Scarlatina 7
Eyre's Practical Remarks .. 11
Hood on Crowing 16
Lee's Ovarian & Uterine Diseases 18
Lee on Diseases of Uterus .. 18
Do. on Speculum 18
Roberton on Women 23
Rowe on Females 24
Smith on Leucorrhœa 25
Tilt on Diseases of Women .. 27
Do. on Change of Life 27
Underwood on Children 28
West on Women 29

HYGIENE.

Armstrong on Naval Hygiene 3
Beale's Laws of Health 5
Do. Health and Disease .. 5
Bennet on Nutrition 5
Blundell's Medicina Mechanica 7
Carter on Training 8
Chavasse's Advice to a Mother .. 9
Granville on Vichy 13
Hartwig on Sea Bathing 14
Do. Physical Education 14
Hufeland's Art 16
Lee's Watering Places of England 18
Do. do. Germany, France, and Switzerland .. 18
Lee's Rhenish Watering Places 18
Parkin on Disease 21
Pickford on Hygiene 22
Robertson on Diet 24
Rumsey's State Medicine 24
Wife's Domain 30
Wilson on Healthy Skin 31
Do. on Mineral Waters .. 31

MATERIA MEDICA and PHARMACY.

PAGE
Bateman's Magnacopia 4
Beasley's Formulary 5
Do. Receipt Book 5
Do. Book of Prescriptions 5
Pereira's Selecta e Præscriptis 22
Pharmacopœia Londinensis .. 22
Prescriber's Pharmacopœia .. 22
Royle's Materia Medica 24
Spurgin's Materia Medica 26
Steggall's Materia Medica .. 26
Do. First Lines for Chemists 26
Stowe's Toxicological Chart .. 26
Taylor on Poisons 27
Wittstein's Pharmacy 31

MEDICINE.

Adams on Rheumatic Gout .. 3
Addison on Supra-Renal Capsules 3
Addison on Cells 3
Barclay on Diagnosis 4
Barlow's Practice of Medicine 4
Basham on Dropsy 4
Beale on Urine 5
Bird's Urinary Deposits 6
Bird on Charcoal 6
Brinton on Stomach 7
Do. on Ulcer of do. 7
Budd on the Liver 8
Do. on Stomach 8
Camplin on Diabetes 8
Chambers on Digestion 8
Davey's Ganglionic 11
Eyre on Stomach 11
Fuller on Rheumatism 12
Gairdner on Gout 12
Granville on Sudden Death .. 13
Gully's Simple Treatment .. 13
Habershon on Stomach 13
Do. on Mercury 13
Hall on Apnœa 13
Hall's Observations 13
Harrison on Lead in Water .. 14
Hassall on Urine 14
Headland on Medicines 15
Hooper's Medical Dictionary .. 16
Hooper's Physician's Vade-Mecum 13
Hughes on Blood Disease .. 16
Inman's New Theory 16
Jones' Animal Chemistry .. 17
Lugol on Scrofula 19
Marcet on Chronic Alcoholism . 19
Peacock on Influenza 21
Pym on Yellow Fever 23
Roberts on Palsy 24
Robertson on Gout 24
Savory's Compendium 24
Semple on Cough 24
Shaw's Remembrancer 25
Smee on Debility 25
Steggall's Medical Manual .. 26

MEDICINE—*continued*.

PAGE
Steggall's Gregory's Conspectus 26
Do. Celsus.. 26
Thomas' Practice of Physic .. 27
Thudichum on Urine 28
Todd's Clinical Lectures 28
Wegg's Observations.. 29
Wells on Gout 29
What to Observe 19
Whitehead on Transmission .. 30
Williams' Principles 30
Wright on Headaches 31

MICROSCOPE.

Beale on Microscope in Medicine 5
Do. How to Work 5
Carpenter on Microscope 8
Schacht on do. 24

MISCELLANEOUS.

Acton on Prostitution 3
Atkinson's Bibliography 4
Bascome on Epidemics 4
Bryce on Sebastopol 7
Cooley's Cyclopædia 9
Forbes' Nature and Art in Disease 12
Guy's Hospital Reports 13
Haycock's Veterinary 14
Lane's Hydropathy 18
Lee on Homœop. and Hydrop. 18
Marcet on Food 19
Massy on Recruits 20
Part's Case Book 21
Pettigrew on Superstitions .. 22

NERVOUS DISEASES AND INDIGESTION.

Carter on Hysteria 8
Child on Indigestion 9
Downing on Neuralgia 11
Hunt on Heartburn 16
Leared on Imperfect Digestion 18
Lobb on Nervous Affections .. 19
Radcliffe on Epilepsy 23
Reynolds on the Brain 23
Rowe on Nervous Diseases .. 24
Sieveking on Epilepsy 25
Turnbull on Stomach 28

OBSTETRICS.

Barnes on Placenta Prævia .. 4
Davis on Parturition.. 11
Kiwisch on Ovaries 9
Lee's Clinical Midwifery 18
Pretty's Aids during Labour .. 22
Priestley on Gravid Uterus .. 23
Ramsbotham's Obstetrics.. .. 23
Do. Midwifery.. .. 23
Sinclair & Johnston's Midwifery 25
Smellie's Obstetric Plates.. .. 25
Smith's Manual of Obstetrics .. 25
Swayne's Aphorisms 26
Waller's Midwifery 29

OPHTHALMOLOGY.

PAGE
Cooper on Injuries of Eye .. 10
Do. on Near Sight 10
Dalrymple on Eye 10
Dixon on the Eye 11
Hogg on Ophthalmoscope .. 15
Holthouse on Strabismus 15
Do. on Impaired Vision 15
Jacob on Eye-ball 16
Jago on Ocular Spectres 16
Jones' Ophthalmic Medicine .. 17
Do. Defects of Sight 17
Do. Eye and Ear 17
Nunneley on the Organs of Vision 21
Walton on Ophthalmic 29

PHYSIOLOGY.

Carpenter's Human 8
Do. Comparative 8
Do. Manual 8
Cottle's Human 10
Heale on Vital Causes 15
Hilton on the Cranium 15
Richardson on Coagulation .. 23
Virchow's Cellular Pathology.. 9

PSYCHOLOGY.

Austin on Paralysis 4
Bucknill and Tuke's Psychological Medicine 8
Burgess on Madness 7
Burnett on Insanity 9
Conolly on Asylums 9
Davey on Nature of Insanity .. 11
Dunn's Physiological Psychology 11
Hood on Criminal Lunatics .. 16
Millingen on Treatment of Insane 20
Monro on Private Asylums .. 20
Noble on Mind 20
Williams (J.) on Insanity .. 30
Williams (J. H.) Unsoundness of Mind 30
Winslow on the Brain 31
Do. Lettsomian Lectures . 31

PULMONARY and CHEST DISEASES, &c.

Addison on Healthy and Diseased Structure 3
Billing on Lungs and Heart .. 6
Blakiston on the Chest 6
Bright on the Chest 7
Cotton on Consumption 10
Do. on Stethoscope 10
Davies on Lungs and Heart .. 11
Dobell on the Chest 11
Fenwick on Consumption 11
Laennec on Auscultation 18
Markham on Heart 20
Richardson on Consumption .. 23
Salter on Asthma 24
Skoda on Auscultation 20
Thompson on Consumption .. 27
Timms on Consumption 28
Turnbull on Consumption .. 28
Weber on Auscultation 29

SCIENCE.

PAGE
Bird's Natural Philosophy .. 4
Burnett's Philosophy of Spirits 8
Craig on Electric Tension .. 10
Garner's Eutherapeia 13
Hardwich's Photography 14
Hinds' Harmonics 15
Jones on Vision 17
Do. on Body, Sense, and Mind 17
Mayne's Lexicon 20
Nourse's Students' Tables .. 21
Price's Photographic Manipulation 22
Rainey on Shells 23
Reymond's Animal Electricity 23
Taylor's Medical Jurisprudence 27
Vestiges of Creation 28
Sequel to ditto 29
Unger's Botanical Letters .. 29

SURGERY.

Adams on Tendons 3
Do. Subcutaneous Surgery 3
Ashton on Rectum 4
Bellingham on Aneurism 5
Bigg on Artificial Limbs 6
Bishop on Bones.. 6
Bryant on Joints 7
Chapman on Ulcers 9
Do. Varicose Veins 9
Cooper (Sir A.) on Testis 9
Do. (S.) Surg. Dictionary 10
Curling on Rectum 10
Do. on Testis 10
Druitt's Surgery 11
Fergusson's Surgery.. 12
Fraser on Chest 13
Gibb on Throat 13
Harrison on Stricture 14
Higginbottom on Nitrate of Silver 15
Hodgson on Prostate 15
James on Hernia 17
Jordan's Clinical Surgery .. 17
Jordan on Skin 17
Lawrence on Ruptures 18
Liston's Surgery.. 19
Macleod's Surgery of the Crimea 19
Maclise on Fractures.. 19
Nunneley on Erysipelas 21
Pemberton on Melanosis 22
Pirrie on Surgery 22
Smith on Stricture 25
Do. on Hæmorrhoids 25
Snow on Chloroform.. 25
Steggall's Surgical Manual .. 26
Teale on Amputation 27
Thompson on Stricture 27
Do. on Prostate.. 27
Toynbee on Ear 28
Wade on Stricture 29
Watson on the Larynx 29
Williamson on Gunshot Injuries 30
Wilson on the Skin 30
Do. Portraits of Skin Diseases 31
Yearsley on Deafness 31
Do. on Throat 31

MR. F. A. ABEL, F.C.S., & MR. C. L. BLOXAM.

HANDBOOK OF CHEMISTRY: THEORETICAL, PRACTICAL, AND TECHNICAL. Second Edition. 8vo. cloth, 15*s.*

MR. ACTON, M.R.C.S.

I.

A PRACTICAL TREATISE ON DISEASES OF THE URINARY AND GENERATIVE ORGANS IN BOTH SEXES. Third Edition. 8vo. cloth, £1. 1*s.* With Plates, £1. 11*s.* 6*d.*

II.

THE FUNCTIONS AND DISORDERS OF THE REPRODUCTIVE ORGANS IN YOUTH, IN ADULT AGE, AND IN ADVANCED LIFE. Considered in their Physiological, Social, and Psychological Relations. Second Edition. 8vo. cloth, 7*s.*

III.

PROSTITUTION: Considered in its Moral, Social, and Sanitary Bearings, with a View to its Amelioration and Regulation. 8vo. cloth, 10*s.* 6*d.*

DR. ADAMS, A.M.

A TREATISE ON RHEUMATIC GOUT; OR, CHRONIC RHEUMATIC ARTHRITIS. 8vo. cloth, with a Quarto Atlas of Plates, 21*s.*

MR. WILLIAM ADAMS, F.R.C.S.

I.

ON THE REPARATIVE PROCESS IN HUMAN TENDONS AFTER SUBCUTANEOUS DIVISION FOR THE CURE OF DEFORMITIES. With Plates. 8vo. cloth, 5*s.*

II.

SKETCH OF THE PRINCIPLES AND PRACTICE OF SUBCUTANEOUS SURGERY. 8vo. cloth, 2*s.* 6*d.*

DR. ADDISON.

ON THE CONSTITUTIONAL AND LOCAL EFFECTS OF DISEASE OF THE SUPRA-RENAL CAPSULES. 4to. cloth. Coloured Plates, 21*s.*

DR. WILLIAM ADDISON, F.R.S.

I.

CELL THERAPEUTICS. 8vo. cloth, 4*s.*

II.

ON HEALTHY AND DISEASED STRUCTURE, AND THE TRUE PRINCIPLES OF TREATMENT FOR THE CURE OF DISEASE, ESPECIALLY CONSUMPTION AND SCROFULA, founded on MICROSCOPICAL ANALYSIS. 8vo. cloth, 12*s.*

THE ANATOMICAL REMEMBRANCER; OR, COMPLETE POCKET ANATOMIST. Fifth Edition, carefully Revised. 32mo. cloth, 3*s.* 6*d.*

DR. ALEXANDER ARMSTRONG, R.N.

OBSERVATIONS ON NAVAL HYGIENE AND SCURVY. More particularly as the latter appeared during a Polar Voyage. 8vo. cloth, 5*s.*

MR. T. J. ASHTON.

ON THE DISEASES, INJURIES, AND MALFORMATIONS OF THE RECTUM AND ANUS. Third Edition. 8vo. cloth, 8s.

MR. ATKINSON.

MEDICAL BIBLIOGRAPHY. Vol. I. Royal 8vo. 16s.

MR. THOS. J. AUSTIN, M.R.C.S. ENG.

A PRACTICAL ACCOUNT OF GENERAL PARALYSIS: Its Mental and Physical Symptoms, Statistics, Causes, Seat, and Treatment. 8vo. cloth, 6s.

MR. THOMAS BALLARD, M.R.C.S.

A NEW AND RATIONAL EXPLANATION OF THE DISEASES PECULIAR TO INFANTS AND MOTHERS; with obvious Suggestions for their Prevention and Cure. Post 8vo. cloth, 4s. 6d.

DR. BARCLAY.

A MANUAL OF MEDICAL DIAGNOSIS. Second Edition. Foolscap 8vo. cloth, 8s. 6d.

DR. T. HERBERT BARKER.

ON THE HYGIENIC MANAGEMENT OF INFANTS AND CHILDREN. 8vo. cloth, 5s.

DR. W. G. BARKER.

ON THE CLIMATE OF WORTHING: its Remedial Influence in Disease, especially of the Lungs. Crown 8vo. cloth, 3s.

DR. BARLOW.

A MANUAL OF THE PRACTICE OF MEDICINE. Fcap. 8vo. cloth, 12s. 6d.

DR. BARNES.

THE PHYSIOLOGY AND TREATMENT OF PLACENTA PRÆVIA; being the Lettsomian Lectures on Midwifery for 1857. Post 8vo. cloth, 6s.

DR. BASCOME.

A HISTORY OF EPIDEMIC PESTILENCES, FROM THE EARLIEST AGES. 8vo. cloth, 8s.

DR. BASHAM.

ON DROPSY, CONNECTED WITH DISEASE OF THE KIDNEYS (MORBUS BRIGHTII), and on some other Diseases of those Organs, associated with Albuminous and Purulent Urine. Illustrated by numerous Drawings from the Microscope. 8vo. cloth, 9s.

MR. BATEMAN.

MAGNACOPIA: A Practical Library of Profitable Knowledge, communicating the general Minutiæ of Chemical and Pharmaceutic Routine, together with the generality of Secret Forms of Preparations; including Concentrated Solutions of Camphor and Copaiba in Water, Mineral Succedaneum, Marmoratum, Silicia, Terro-Metallicum, Pharmaceutic Condensions, Prismatic Crystallization, Crystallized Aromatic Salt of Vinegar, Spa Waters; newly-invented Writing Fluids; Etching on Steel or Iron; with an extensive Variety of *et cætera*. Third Edition. 18mo. 6s.

MR. LIONEL J. BEALE, M.R.C.S.

I.

THE LAWS OF HEALTH IN THEIR RELATIONS TO MIND AND BODY. A Series of Letters from an Old Practitioner to a Patient. Post 8vo. cloth, 7*s*. 6*d*.

II.

HEALTH AND DISEASE, IN CONNECTION WITH THE GENERAL PRINCIPLES OF HYGIENE. Fcap. 8vo., 2*s*. 6*d*.

DR. BEALE, F.R.S.

I.

HOW TO WORK WITH THE MICROSCOPE. Crown 8vo. cloth, 5*s*.
ILLUSTRATIONS TO THE ABOVE, WITH DESCRIPTION, 1*s*. 6*d*.

II.

THE MICROSCOPE, IN ITS APPLICATION TO PRACTICAL MEDICINE. With a Coloured Plate, and 270 Woodcuts. Second Edition. 8vo. cloth, 14*s*.

III.

ON THE ANATOMY OF THE LIVER. Illustrated with 66 Photographs of the Author's Drawings. 8vo. cloth, 6*s*. 6*d*.

IV.

ILLUSTRATIONS OF THE SALTS OF URINE, URINARY DEPOSITS, and CALCULI. 37 Plates, containing upwards of 170 Figures copied from Nature, with descriptive Letterpress. 8vo. cloth, 9*s*. 6*d*.

MR. BEASLEY.

I.

THE BOOK OF PRESCRIPTIONS; containing 3000 Prescriptions. Collected from the Practice of the most eminent Physicians and Surgeons, English and Foreign. Second Edition. 18mo. cloth, 6*s*.

II.

THE DRUGGIST'S GENERAL RECEIPT-BOOK: comprising a copious Veterinary Formulary and Table of Veterinary Materia Medica; Patent and Proprietary Medicines, Druggists' Nostrums, &c.; Perfumery, Skin Cosmetics, Hair Cosmetics, and Teeth Cosmetics; Beverages, Dietetic Articles, and Condiments; Trade Chemicals, Miscellaneous Preparations and Compounds used in the Arts, &c.; with useful Memoranda and Tables. Fourth Edition. 18mo. cloth, 6*s*.

III.

THE POCKET FORMULARY AND SYNOPSIS OF THE BRITISH AND FOREIGN PHARMACOPŒIAS; comprising standard and approved Formulæ for the Preparations and Compounds employed in Medical Practice. Seventh Edition, corrected and enlarged. 18mo. cloth, 6*s*.

DR. O'B. BELLINGHAM.

ON ANEURISM, AND ITS TREATMENT BY COMPRESSION. 12mo. cloth, 4*s*.

DR. HENRY BENNET.

I.

NUTRITION IN HEALTH AND DISEASE. Post 8vo. cloth, 5*s*.

II.

A PRACTICAL TREATISE ON INFLAMMATION AND OTHER DISEASES OF THE UTERUS. Third Edition, revised, with Additions. 8vo. cloth, 12*s*. 6*d*.

III.

A REVIEW OF THE PRESENT STATE OF UTERINE PATHOLOGY. 8vo. cloth, 4*s*.

MR. HENRY HEATHER BIGG.

I.

THE MECHANICAL APPLIANCES NECESSARY FOR THE TREATMENT OF DEFORMITIES. Post 8vo. cloth, 4*s.*

II.

ARTIFICIAL LIMBS; THEIR CONSTRUCTION AND APPLICATION. With Engravings on Wood. 8vo. cloth, 3*s.*

DR. BILLING, F.R.S.

ON DISEASES OF THE LUNGS AND HEART. 8vo. cloth, 6*s.*

DR. GOLDING BIRD, F.R.S.

I.

URINARY DEPOSITS; THEIR DIAGNOSIS, PATHOLOGY, AND THERAPEUTICAL INDICATIONS. With Engravings on Wood. Fifth Edition. Post 8vo. cloth, 10*s.* 6*d.*

II.

ELEMENTS OF NATURAL PHILOSOPHY; being an Experimental Introduction to the Study of the Physical Sciences. Illustrated with numerous Engravings on Wood. Fifth Edition. By GOLDING BIRD, M.D., F.R.S., and CHARLES BROOKE, M.B. Cantab., F.R.S. Fcap. 8vo. cloth, 12*s.* 6*d.*

MR. P. HINCKES BIRD, F.R.C.S.

PRACTICAL TREATISE ON THE DISEASES OF CHILDREN AND INFANTS AT THE BREAST. Translated from the French of M. BOUCHUT, with Notes and Additions. 8vo. cloth. 20*s.*

MR. JAMES BIRD.

VEGETABLE CHARCOAL: its MEDICINAL and ECONOMIC PROPERTIES; with Practical Remarks on its Use in Chronic Affections of the Stomach and Bowels. Second Edition, 8vo. cloth, 3*s.* 6*d.*

MR. BISHOP, F.R.S.

I.

ON DEFORMITIES OF THE HUMAN BODY, their Pathology and Treatment. With Engravings on Wood. 8vo. cloth, 10*s.*

II.

ON ARTICULATE SOUNDS, AND ON THE CAUSES AND CURE OF IMPEDIMENTS OF SPEECH. 8vo. cloth, 4*s.*

III.

LETTSOMIAN LECTURES ON THE PHYSICAL CONSTITUTION, DISEASES AND FRACTURES OF BONES. Post 8vo., 2*s.* 6*d.*

DR. BLAKISTON, F.R.S.

PRACTICAL OBSERVATIONS ON CERTAIN DISEASES OF THE CHEST; and on the Principles of Auscultation. 8vo. cloth, 12*s.*

DR. JOHN W. F. BLUNDELL.

MEDICINA MECHANICA; or, the Theory and Practice of Active and Passive Exercises and Manipulations in the Cure of Chronic Disease. Post 8vo. cloth, 6*s*.

MR. JOHN E. BOWMAN.

I.

PRACTICAL CHEMISTRY, including Analysis. With numerous Illustrations on Wood. Third Edition. Foolscap 8vo. cloth, 6*s*. 6*d*.

II.

MEDICAL CHEMISTRY; with Illustrations on Wood. Third Edition. Fcap. 8vo. cloth, 6*s*. 6*d*.

DR. JAMES BRIGHT.

ON DISEASES OF THE HEART, LUNGS, & AIR PASSAGES; with a Review of the several Climates recommended in these Affections. Third Edition. Post 8vo. cloth, 9*s*.

DR. BRINTON.

I.

THE DISEASES OF THE STOMACH, with an Introduction on its Anatomy and Physiology; being Lectures delivered at St. Thomas's Hospital. Post 8vo. cloth, 10*s*. 6*d*.

II.

THE SYMPTOMS, PATHOLOGY, AND TREATMENT OF ULCER OF THE STOMACH. Post 8vo. cloth, 5*s*.

MR. BERNARD E. BRODHURST.

I.

ON LATERAL CURVATURE OF THE SPINE: its Pathology and Treatment. Post 8vo. cloth, with Plates, 3*s*.

II.

ON THE NATURE AND TREATMENT OF CLUBFOOT AND ANALOGOUS DISTORTIONS involving the TIBIO-TARSAL ARTICULATION. With Engravings on Wood. 8vo. cloth, 4*s*. 6*d*.

MR. ISAAC BAKER BROWN, F.R.C.S.

I.

ON SOME DISEASES OF WOMEN ADMITTING OF SURGICAL TREATMENT. With Plates, 8vo. cloth, 10*s*. 6*d*.

II.

ON SCARLATINA: its Nature and Treatment. Second Edition. Fcap. 8vo. cloth, 3*s*.

MR. THOMAS BRYANT, F.R.C.S.

ON THE DISEASES AND INJURIES OF THE JOINTS. CLINICAL AND PATHOLOGICAL OBSERVATIONS. Post 8vo. cloth, 7*s*. 6*d*.

DR. BRYCE.

ENGLAND AND FRANCE BEFORE SEBASTOPOL, looked at from a Medical Point of View. 8vo. cloth, 6*s*.

DR. BUDD, F.R.S.

I.

ON DISEASES OF THE LIVER. Illustrated with Coloured Plates and Engravings on Wood. Third Edition. 8vo. cloth, 16*s.*

II.

ON THE ORGANIC DISEASES AND FUNCTIONAL DISORDERS OF THE STOMACH. 8vo. cloth, 9*s.*

DR. JOHN CHARLES BUCKNILL, & DR. DANIEL H. TUKE.

A MANUAL OF PSYCHOLOGICAL MEDICINE: containing the History, Nosology, Description, Statistics, Diagnosis, Pathology, and Treatment of Insanity. 8vo. cloth, 15*s.*

DR. BURGESS.

THE MEDICAL AND LEGAL RELATIONS OF MADNESS; showing a Cellular Theory of Mind, and of Nerve Force, and also of Vegetative Vital Force. 8vo. cloth, 7*s.*

DR. BURNETT.

I.

THE PHILOSOPHY OF SPIRITS IN RELATION TO MATTER. 8vo. cloth, 9*s.*

II.

INSANITY TESTED BY SCIENCE. 8vo. cloth, 5*s.*

DR. JOHN M. CAMPLIN, F.L.S.

ON DIABETES, AND ITS SUCCESSFUL TREATMENT. Second Edition. Fcap. 8vo. cloth, 3*s.* 6*d.*

MR. ROBERT B. CARTER, M.R.C.S.

I.

ON THE INFLUENCE OF EDUCATION AND TRAINING IN PREVENTING DISEASES OF THE NERVOUS SYSTEM. Fcap. 8vo., 6*s.*

II.

THE PATHOLOGY AND TREATMENT OF HYSTERIA. Post 8vo. cloth, 4*s.* 6*d.*

DR. CARPENTER, F.R.S.

I.

PRINCIPLES OF HUMAN PHYSIOLOGY. With numerous Illustrations on Steel and Wood. Fifth Edition. 8vo. cloth, 26*s.*

II.

PRINCIPLES OF COMPARATIVE PHYSIOLOGY. Illustrated with 300 Engravings on Wood. Fourth Edition. 8vo. cloth, 24*s.*

III.

A MANUAL OF PHYSIOLOGY. With numerous Illustrations on Steel and Wood. Third Edition. Fcap. 8vo. cloth, 12*s.* 6*d.*

IV.

THE MICROSCOPE AND ITS REVELATIONS. With numerous Engravings on Wood. Second Edition. Fcap. 8vo. cloth, 12*s.* 6*d.*

DR. CHAMBERS.

DIGESTION AND ITS DERANGEMENTS. Post 8vo. cloth, 10*s.* 6*d.*

DR. CHANCE, M.B.

VIRCHOW'S CELLULAR PATHOLOGY, AS BASED UPON PHYSIOLOGICAL AND PATHOLOGICAL HISTOLOGY.

With 144 Engravings on Wood. 8vo. cloth, 16*s*.

MR. H. T. CHAPMAN, F.R.C.S.

I.

THE TREATMENT OF OBSTINATE ULCERS AND CUTANEOUS ERUPTIONS OF THE LEG WITHOUT CONFINEMENT.

Third Edition. Post 8vo. cloth, 3*s*. 6*d*.

II.

VARICOSE VEINS:

their Nature, Consequences, and Treatment, Palliative and Curative. Post 8vo. cloth, 3*s*. 6*d*.

MR. PYE HENRY CHAVASSE, F.R.C.S.

ADVICE TO A MOTHER ON THE MANAGEMENT OF HER OFFSPRING.

Fifth Edition. Foolscap 8vo., 2*s*. 6*d*.

DR. G. C. CHILD.

ON INDIGESTION, AND CERTAIN BILIOUS DISORDERS OFTEN CONJOINED WITH IT.

Second Edition. 8vo. cloth, 6*s*.

MR. J. PATERSON CLARK, M.A.

THE ODONTALGIST; OR, HOW TO PRESERVE THE TEETH, CURE TOOTHACHE, AND REGULATE DENTITION FROM INFANCY TO AGE.

With plates. Post 8vo. cloth, 5*s*.

MR. JOHN CLAY, M.R.C.S.

KIWISCH ON DISEASES OF THE OVARIES:

Translated, by permission, from the last German Edition of his Clinical Lectures on the Special Pathology and Treatment of the Diseases of Women. With Notes, and an Appendix on the Operation of Ovariotomy. Royal 12mo. cloth, 16*s*.

DR. CONOLLY.

THE CONSTRUCTION AND GOVERNMENT OF LUNATIC ASYLUMS AND HOSPITALS FOR THE INSANE.

With Plans. Post 8vo. cloth, 6*s*.

MR. COOLEY.

COMPREHENSIVE SUPPLEMENT TO THE PHARMACOPŒIAS.

THE CYCLOPÆDIA OF PRACTICAL RECEIPTS, AND COLLATERAL INFORMATION IN THE ARTS, PROFESSIONS, MANUFACTURES, AND TRADES, INCLUDING MEDICINE, PHARMACY, AND DOMESTIC ECONOMY;

designed as a Compendious Book of Reference for the Manufacturer, Tradesman, Amateur, and Heads of Families. Third and greatly enlarged Edition, 8vo. cloth, 26*s*.

SIR ASTLEY COOPER, BART., F.R.S.

ON THE STRUCTURE AND DISEASES OF THE TESTIS.

With 24 Plates. Second Edition. Royal 4to., 20*s*.

DR. DAVEY.

I.

THE GANGLIONIC NERVOUS SYSTEM: its Structure, Functions, and Diseases. 8vo. cloth, 9*s.*

II.

ON THE NATURE AND PROXIMATE CAUSE OF INSANITY. Post 8vo. cloth, 3*s.*

DR. HERBERT DAVIES.

ON THE PHYSICAL DIAGNOSIS OF DISEASES OF THE LUNGS AND HEART. Second Edition. Post 8vo. cloth, 8*s.*

DR. HALL DAVIS.

ILLUSTRATIONS OF DIFFICULT PARTURITION. Post 8vo. cloth, 6*s.* 6*d.*

MR. DIXON.

A GUIDE TO THE PRACTICAL STUDY OF DISEASES OF THE EYE. Second Edition. Post 8vo. cloth, 9*s.*

DR. DOBELL.

DEMONSTRATIONS OF DISEASES IN THE CHEST, AND THEIR PHYSICAL DIAGNOSIS. Illustrated with Coloured Plates. 8vo. cloth, 12*s.* 6*d.*

DR. TOOGOOD DOWNING.

NEURALGIA: its various Forms, Pathology, and Treatment. THE JACKSONIAN PRIZE ESSAY FOR 1850. 8vo. cloth, 10*s.* 6*d.*

DR. DRUITT, F.R.C.S.

THE SURGEON'S VADE-MECUM; with numerous Engravings on Wood. Eighth Edition. Foolscap 8vo. cloth, 12*s.* 6*d.*

MR. DUNN, F.R.C.S.

AN ESSAY ON PHYSIOLOGICAL PSYCHOLOGY. 8vo. cloth, 4*s.*

DR. JOHN C. EGAN.

SYPHILITIC DISEASES: THEIR PATHOLOGY, DIAGNOSIS, AND TREATMENT: including Experimental Researches on Inoculation, as a Differential Agent in Testing the Character of these Affections. 8vo. cloth, 9*s.*

SIR JAMES EYRE, M.D.

I.

THE STOMACH AND ITS DIFFICULTIES. Fifth Edition. Fcap. 8vo. cloth, 2*s.* 6*d.*

II.

PRACTICAL REMARKS ON SOME EXHAUSTING DISEASES. Second Edition. Post 8vo. cloth, 4*s.* 6*d.*

DR. FENWICK.

ON SCROFULA AND CONSUMPTION. Clergyman's Sore Throat, Catarrh, Croup, Bronchitis, Asthma. Fcap. 8vo., 2*s.* 6*d.*

DR. GIBB, M.R.C.P.

ON DISEASES OF THE THROAT, EPIGLOTTIS, AND WINDPIPE. Post 8vo. cloth, 5*s.*

MRS. GODFREY.

ON THE NATURE, PREVENTION, TREATMENT, AND CURE OF SPINAL CURVATURES and DEFORMITIES of the CHEST and LIMBS, without ARTIFICIAL SUPPORTS or any MECHANICAL APPLIANCES. Third Edition, Revised and Enlarged. 8vo. cloth, 5*s.*

DR. GRANVILLE, F.R.S.

I.

THE MINERAL SPRINGS OF VICHY: their Efficacy in the Treatment of Gout, Indigestion, Gravel, &c. 8vo. cloth, 5*s.*

II.

ON SUDDEN DEATH. Post 8vo., 2*s.* 6*d.*

MR. GRAY, M.R.C.S.

PRESERVATION OF THE TEETH indispensable to Comfort and Appearance, Health, and Longevity. 18mo. cloth, 3*s.*

MR. GRIFFITHS.

CHEMISTRY OF THE FOUR SEASONS—Spring, Summer, Autumn, Winter. Illustrated with Engravings on Wood. Second Edition. Foolscap 8vo. cloth, 7*s.* 6*d.*

DR. GULLY.

THE SIMPLE TREATMENT OF DISEASE; deduced from the Methods of Expectancy and Revulsion. 18mo. cloth, 4*s.*

DR. GUY.

HOOPER'S PHYSICIAN'S VADE-MECUM; OR, MANUAL OF THE PRINCIPLES AND PRACTICE OF PHYSIC. New Edition, considerably enlarged, and rewritten. Foolscap 8vo. cloth, 12*s.* 6*d.*

GUY'S HOSPITAL REPORTS. Third Series. Vols. I. to VI., 8vo., 7*s.* 6*d.* each.

DR. HABERSHON, F.R.C.P.

I.

OBSERVATIONS ON DISEASES OF THE ALIMENTARY CANAL, ŒSOPHAGUS, STOMACH, CÆCUM, and INTESTINES. 8vo. cloth, 10*s.* 6*d.*

II.

ON THE INJURIOUS EFFECTS OF MERCURY IN THE TREATMENT OF DISEASE. Post 8vo. cloth, 3*s.* 6*d.*

DR. MARSHALL HALL, F.R.S.

I.

PRONE AND POSTURAL RESPIRATION IN DROWNING AND OTHER FORMS OF APNŒA OR SUSPENDED RESPIRATION. Post 8vo. cloth. 5*s.*

II.

PRACTICAL OBSERVATIONS AND SUGGESTIONS IN MEDICINE. Second Series. Post 8vo. cloth, 8*s.* 6*d.*

DR. C. RADCLYFFE HALL.

TORQUAY IN ITS MEDICAL ASPECT AS A RESORT FOR PULMONARY INVALIDS. Post 8vo. cloth, 5*s.*

MR. HARDWICH.

A MANUAL OF PHOTOGRAPHIC CHEMISTRY. Fifth Edition. Foolscap 8vo. cloth, 7*s.* 6*d.*

MR. HARE, M.R.C.S.

PRACTICAL OBSERVATIONS ON THE PREVENTION, CAUSES, AND TREATMENT OF CURVATURES OF THE SPINE; with Engravings. Third Edition. 8vo. cloth, 6*s.*

MR. HARRISON, F.R.C.S.

THE PATHOLOGY AND TREATMENT OF STRICTURE OF THE URETHRA. Second Edition. 8vo. cloth, 5*s.*

DR. JAMES B. HARRISON.

ON THE CONTAMINATION OF WATER BY THE POISON OF LEAD, and its Effects on the Human Body. Foolscap 8vo. cloth, 3*s.* 6*d.*

DR. HARTWIG.

I.

ON SEA BATHING AND SEA AIR. Fcap. 8vo., 2*s.* 6*d.*

II.

ON THE PHYSICAL EDUCATION OF CHILDREN. Fcap. 8vo., 2*s.* 6*d.*

DR. A. H. HASSALL.

I.

THE MICROSCOPIC ANATOMY OF THE HUMAN BODY, IN HEALTH AND DISEASE. Illustrated with Several Hundred Drawings in Colour. Two vols. 8vo. cloth, £1. 10*s.*

II.

THE URINE, IN HEALTH AND DISEASE; or, a Simple Explanation of the Physical Properties, Composition, and Uses of the Urine, of the Functions of the Kidneys, and of the Treatment of Urinary Disorders. With Twenty-four Engravings. Post 8vo. cloth, 5*s.*

MR. ALFRED HAVILAND, M.R.C.S.

CLIMATE, WEATHER, AND DISEASE; being a Sketch of the Opinions of the most celebrated Ancient and Modern Writers with regard to the Influence of Climate and Weather in producing Disease. With Four coloured Engravings. 8vo. cloth, 7*s.*

MR. WILLIAM HAYCOCK, M.R.C.V.S.

A TREATISE ON THE PRINCIPLES AND PRACTICE OF VETERINARY MEDICINE AND SURGERY. 8vo. boards, 6*s.* 6*d.*

DR. HEADLAND.

ON THE ACTION OF MEDICINES IN THE SYSTEM. Being the Prize Essay to which the Medical Society of London awarded the Fothergillian Gold Medal for 1852. Third Edition. 8vo. cloth, 12*s.* 6*d.*

DR. HEALE.

A TREATISE ON VITAL CAUSES. 8vo. cloth, 9*s.*

MR. HIGGINBOTTOM, F.R.S., F.R.C.S.E.

I.

AN ESSAY ON THE USE OF THE NITRATE OF SILVER IN THE CURE OF INFLAMMATION, WOUNDS, AND ULCERS. Second Edition. Price 5*s.*

II.

ADDITIONAL OBSERVATIONS ON THE NITRATE OF SILVER; with full Directions for its Use as a Therapeutic Agent. 8vo., 2*s.* 6*d.*

MR. JOHN HILTON, F.R.S.

ON THE DEVELOPMENT AND DESIGN OF CERTAIN PORTIONS OF THE CRANIUM. Illustrated with Plates in Lithography. 8vo. cloth, 6*s.*

DR. HINDS.

THE HARMONIES OF PHYSICAL SCIENCE IN RELATION TO THE HIGHER SENTIMENTS; with Observations on Medical Studies, and on the Moral and Scientific Relations of Medical Life. Post 8vo., cloth, 4*s.*

DR. DECIMUS HODGSON.

THE PROSTATE GLAND, AND ITS ENLARGEMENT IN OLD AGE. With 12 Plates. Royal 8vo., cloth, 6*s.*

MR. JABEZ HOGG.

THE OPHTHALMOSCOPE: an Essay on its value in the Exploration of Internal Eye Diseases. Second Edition. Cloth, 3*s.* 6*d.*

MR. LUTHER HOLDEN, F.R.C.S.

I.

HUMAN OSTEOLOGY: with Plates, showing the Attachments of the Muscles. Second Edition. 8vo. cloth, 16*s.*

II.

A MANUAL OF THE DISSECTION OF THE HUMAN BODY. 12mo. cloth, 14*s.*

MR. C. HOLTHOUSE.

I.

ON SQUINTING, PARALYTIC AFFECTIONS OF THE EYE, and CERTAIN FORMS OF IMPAIRED VISION. Fcap. 8vo. cloth, 4*s.* 6*d.*

II.

LECTURES ON STRABISMUS, delivered at the Westminster Hospital. 8vo. cloth, 4*s.*

DR. W. CHARLES HOOD.

SUGGESTIONS FOR THE FUTURE PROVISION OF CRIMINAL LUNATICS. 8vo. cloth, 5*s.* 6*d.*

MR. P. HOOD.

THE SUCCESSFUL TREATMENT OF SCARLET FEVER; also, OBSERVATIONS ON THE PATHOLOGY AND TREATMENT OF CROWING INSPIRATIONS OF INFANTS. Post 8vo. cloth, 5*s.*

DR. HOOPER.

THE MEDICAL DICTIONARY; containing an Explanation of the Terms used in Medicine and the Collateral Sciences. Eighth Edition. Edited by KLEIN GRANT, M.D. 8vo. cloth, 30*s.*

MR. JOHN HORSLEY.

A CATECHISM OF CHEMICAL PHILOSOPHY; being a Familiar Exposition of the Principles of Chemistry and Physics. With Engravings on Wood. Designed for the Use of Schools and Private Teachers. Post 8vo. cloth, 6*s.* 6*d.*

DR. HUFELAND.

THE ART OF PROLONGING LIFE. Second Edition. Edited by ERASMUS WILSON, F.R.S. Foolscap 8vo., 2*s.* 6*d.*

DR. VAUGHAN HUGHES.

BLOOD DISEASE. Crown 8vo. cloth, 4*s.* 6*d.*

MR. W. CURTIS HUGMAN, F.R.C.S.

ON HIP-JOINT DISEASE; with reference especially to Treatment by Mechanical Means for the Relief of Contraction and Deformity of the Affected Limb. 8vo. cloth, 3*s.* 6*d.*

DR. HENRY HUNT.

ON HEARTBURN AND INDIGESTION. 8vo. cloth, 5*s.*

DR. INMAN, M.R.C.P.

I.

ON MYALGIA: ITS NATURE, CAUSES, AND TREATMENT; being a Treatise on Painful and other Affections of the Muscular System. Second Edition. 8vo. cloth, 9*s.*

II.

FOUNDATION FOR A NEW THEORY AND PRACTICE OF MEDICINE. Crown 8vo. cloth, 7*s.*

DR. ARTHUR JACOB, F.R.C.S.

A TREATISE ON THE INFLAMMATIONS OF THE EYE-BALL. Foolscap 8vo. cloth, 5*s.*

DR. JAMES JAGO, A.B., CANTAB.; M.B., OXON.

OCULAR SPECTRES AND STRUCTURES AS MUTUAL EXPONENTS. Illustrated with Engravings on Wood. 8vo. cloth, 5*s.*

MR. J. H. JAMES, F.R.C.S.

PRACTICAL OBSERVATIONS ON THE OPERATIONS FOR STRANGULATED HERNIA. 8vo. cloth, 5*s.*

DR. BENCE JONES, F.R.S.

I.

MULDER ON WINE. Foolscap 8vo. cloth, 6*s.*

II.

ON ANIMAL CHEMISTRY, in its relation to STOMACH and RENAL DISEASES. 8vo. cloth, 6*s.*

DR. HANDFIELD JONES, F.R.S., & DR. EDWARD H. SIEVEKING.

A MANUAL OF PATHOLOGICAL ANATOMY. Illustrated with numerous Engravings on Wood. Foolscap 8vo. cloth, 12*s.* 6*d.*

MR. WHARTON JONES, F.R.S.

I.

A MANUAL OF THE PRINCIPLES AND PRACTICE OF OPHTHALMIC MEDICINE AND SURGERY; illustrated with Engravings, plain and coloured. Second Edition. Foolscap 8vo. cloth, 12*s.* 6*d.*

II.

THE WISDOM AND BENEFICENCE OF THE ALMIGHTY, AS DISPLAYED IN THE SENSE OF VISION; being the Actonian Prize Essay for 1851. With Illustrations on Steel and Wood. Foolscap 8vo. cloth, 4*s.* 6*d.*

III.

DEFECTS OF SIGHT: their Nature, Causes, Prevention, and General Management. Fcap. 8vo. 2*s.* 6*d.*

IV.

A CATECHISM OF THE MEDICINE AND SURGERY OF THE EYE AND EAR. For the Clinical Use of Hospital Students. Fcap. 8vo. 2*s.* 6*d.*

V.

A CATECHISM OF THE PHYSIOLOGY AND PHILOSOPHY OF BODY, SENSE, AND MIND. For Use in Schools and Colleges. Fcap. 8vo., 2*s.* 6*d.*

MR. FURNEAUX JORDAN, M.R.C.S.

AN INTRODUCTION TO CLINICAL SURGERY; WITH A Method of Investigating and Reporting Surgical Cases. Fcap. 8vo. cloth, 5*s.*

DR. ROBERT J. JORDAN.

SKIN DISEASES AND THEIR REMEDIES.
Fcap. 8vo. cloth, 2*s.* 6*d.*

MR. JUDD.

A PRACTICAL TREATISE ON URETHRITIS AND SYPHILIS: including Observations on the Power of the Menstruous Fluid, and of the Discharge from Leucorrhœa and Sores to produce Urethritis: with a variety of Examples, Experiments, Remedies, and Cures. 8vo. cloth, £1. 5*s.*

DR. LAENNEC.

A MANUAL OF AUSCULTATION AND PERCUSSION. Translated and Edited by J. B. SHARPE, M.R.C.S. 3*s.*

DR. LANE, M.A.

HYDROPATHY; OR, HYGIENIC MEDICINE. An Explanatory Essay. Second Edition. Post 8vo. cloth, 5*s.*

MR. LAWRENCE, F.R.S.

A TREATISE ON RUPTURES. The Fifth Edition, considerably enlarged. 8vo. cloth, 16*s.*

DR. LEARED, M.R.C.P.

IMPERFECT DIGESTION: ITS CAUSES AND TREATMENT. Foolscap. 8vo. cloth, 4*s.*

DR. EDWIN LEE.

I.

THE EFFECT OF CLIMATE ON TUBERCULOUS DISEASE, with Notices of the chief Foreign Places of Winter Resort. Small 8vo. cloth, 5*s.* 6*d.*

II.

THE WATERING PLACES OF ENGLAND, CONSIDERED with Reference to their Medical Topography. Fourth Edition. Foolscap 8vo. cloth, 7*s.* 6*d.*

III.

THE BATHS OF GERMANY, FRANCE, & SWITZERLAND. Third Edition. Post 8vo. cloth, 8*s.* 6*d.*

IV.

THE BATHS OF RHENISH GERMANY. Post 8vo. cloth, 4*s.*

V.

HOMŒOPATHY AND HYDROPATHY IMPARTIALLY APPRECIATED. With Notes illustrative of the Influence of the Mind over the Body. Fourth Edition. Post 8vo. cloth, 3*s.* 6*d.*

DR. ROBERT LEE, F.R.S.

I.

A TREATISE ON THE SPECULUM; with Three Hundred Cases. 8vo. cloth, 4*s.* 6*d.*

II.

CLINICAL REPORTS OF OVARIAN AND UTERINE DISEASES, with Commentaries. Foolscap 8vo. cloth, 6*s.* 6*d.*

III.

CLINICAL MIDWIFERY: comprising the Histories of 545 Cases of Difficult, Preternatural, and Complicated Labour, with Commentaries. Second Edition. Foolscap 8vo. cloth, 5*s.*

IV.

PRACTICAL OBSERVATIONS ON DISEASES OF THE UTERUS. With coloured Plates. Two Parts. Imperial 4to., 7*s.* 6*d.* each Part.

MR. LISTON, F.R.S.

PRACTICAL SURGERY. Fourth Edition. 8vo. cloth, 22*s.*

MR. H. W. LOBB, L.S.A., M.R.C.S.E.

ON SOME OF THE MORE OBSCURE FORMS OF NERVOUS AFFECTIONS, THEIR PATHOLOGY AND TREATMENT. With an Introduction on the Physiology of Digestion and Assimilation, and the Generation and Distribution of Nerve Force. Based upon Original Microscopical Observations. With Engravings. 8vo. cloth, 10*s.* 6*d.*

LONDON MEDICAL SOCIETY OF OBSERVATION.

WHAT TO OBSERVE AT THE BED-SIDE, AND AFTER DEATH. Published by Authority. Second Edition. Foolscap 8vo. cloth, 4*s.* 6*d.*

M. LUGOL.

ON SCROFULOUS DISEASES. Translated from the French, with Additions by W. H. RANKING, M.D., Physician to the Suffolk General Hospital. 8vo. cloth, 10*s.* 6*d.*

MR. M'CLELLAND, F.L.S., F.G.S.

SKETCH OF THE MEDICAL TOPOGRAPHY, OR CLIMATE AND SOILS, OF BENGAL AND THE N. W. PROVINCES. Post 8vo. cloth, 4*s.* 6*d.*

DR. GEORGE H. B. MACLEOD, F.R.C.S. (EDIN.)

NOTES ON THE SURGERY OF THE CRIMEAN WAR; with REMARKS on GUN-SHOT WOUNDS. 8vo. cloth, 10*s.* 6*d.*

MR. JOSEPH MACLISE, F.R.C.S.

I.

SURGICAL ANATOMY. A Series of Dissections, illustrating the Principal Regions of the Human Body.

The Second Edition, complete in XIII. Fasciculi, imperial folio, 5*s.* each. Bound in cloth, £3. 12*s.*; or in morocco, £4. 4*s.*

II.

ON DISLOCATIONS AND FRACTURES. This Work is Uniform with the Author's "Surgical Anatomy;" each Fasciculus contains Four beautifully executed Lithographic Drawings. Complete in Nine Fasciculi, imperial folio, 5*s.* each. Bound in cloth, £2. 10*s.*; or in morocco, £2. 17*s.*

DR. MARCET, F.R.S.

I.

ON THE COMPOSITION OF FOOD, AND HOW IT IS ADULTERATED; with Practical Directions for its Analysis. 8vo. cloth, 6*s.* 6*d.*

II.

ON CHRONIC ALCOHOLIC INTOXICATION, OR ALCOHOLIC STIMULANTS IN CONNEXION WITH THE NERVOUS SYSTEM. Foolscap 8vo. cloth, 3*s.* 6*d.*

DR. MARKHAM.

I.

DISEASES OF THE HEART: THEIR PATHOLOGY, DIAGNOSIS, AND TREATMENT. Second Edition. Post 8vo. cloth, 6*s*.

II.

SKODA ON AUSCULTATION AND PERCUSSION. Post 8vo. cloth, 6*s*.

MR. J. RANALD MARTIN, F.R.S.

THE INFLUENCE OF TROPICAL CLIMATES ON EUROPEAN CONSTITUTIONS. Originally by the late JAMES JOHNSON, M.D., and now entirely rewritten; including Practical Observations on the Diseases of European Invalids on their Return from Tropical Climates. Seventh Edition. 8vo. cloth, 16*s*.

DR. MASSY.

ON THE EXAMINATION OF RECRUITS; intended for the Use of Young Medical Officers on Entering the Army. 8vo. cloth, 5*s*.

DR. MAYNE.

AN EXPOSITORY LEXICON OF THE TERMS, ANCIENT AND MODERN, IN MEDICAL AND GENERAL SCIENCE, including a complete MEDICAL AND MEDICO-LEGAL VOCABULARY, and presenting the correct Pronunciation, Derivation, Definition, and Explanation of the Names, Analogues, Synonymes, and Phrases (in English, Latin, Greek, French, and German,) employed in Science and connected with Medicine. Complete in 10 Parts, price 5*s*. each.

MR. MAUNDER, F.R.C.S.

RICORD'S LECTURES ON CHANCRE. With Remarks on Perinaeal Section of Stricture of the Urethra. 8vo. cloth, 8*s*.

DR. MILLINGEN.

ON THE TREATMENT AND MANAGEMENT OF THE INSANE; with Considerations on Public and Private Lunatic Asylums. 18mo. cloth, 4*s*. 6*d*.

MR. JOHN L. MILTON, M.R.C.S.

PRACTICAL OBSERVATIONS ON A NEW WAY OF TREATING GONORRHŒA. With some Remarks on the Cure of Inveterate Cases. 8vo. cloth, 5s.

DR. MONRO.

REFORM IN PRIVATE LUNATIC ASYLUMS. 8vo. cloth, 4*s*.

DR. NOBLE.

THE HUMAN MIND IN ITS RELATIONS WITH THE BRAIN AND NERVOUS SYSTEM. Post 8vo. cloth, 4*s*. 6*d*.

MR. NOURSE, M.R.C.S.

TABLES FOR STUDENTS. Price One Shilling the Set.

1. Divisions and Classes of the Animal Kingdom.
2. Classes and Orders of the Vertebrate Sub-kingdom.
3. Classes of the Vegetable Kingdom, according to the Natural and Artificial Systems.
4. Table of the Elements, with their Chemical Equivalents and Symbols.

MR. NUNNELEY, F.R.C.S.E.

I.

ON THE ORGANS OF VISION: THEIR ANATOMY AND PHYSIOLOGY.

With Plates, 8vo. cloth, 15*s.*

II.

A TREATISE ON THE NATURE, CAUSES, AND TREATMENT OF ERYSIPELAS.

8vo. cloth, 10*s.* 6*d.*

DR. ODLING.

A COURSE OF PRACTICAL CHEMISTRY, FOR THE USE OF MEDICAL STUDENTS.

Arranged with express reference to the Three Months' Summer Course. Post 8vo. cloth, 4*s.* 6*d.*

TRANSACTIONS OF THE ODONTOLOGICAL SOCIETY OF LONDON.

With Plates. Vol. I., 8vo. cloth, 8*s.* 6*d.*

MR. PAGET.

A DESCRIPTIVE CATALOGUE OF THE ANATOMICAL MUSEUM OF ST. BARTHOLOMEW'S HOSPITAL.

Vol. I. Morbid Anatomy. 8vo. cloth, 5*s.*

DITTO. Vol. II. Natural and Congenitally Malformed Structures, and Lists of the Models, Casts, Drawings, and Diagrams. 5*s.*

MR. LANGSTON PARKER.

THE MODERN TREATMENT OF SYPHILITIC DISEASES,

both Primary and Secondary; comprising the Treatment of Constitutional and Confirmed Syphilis, by a safe and successful Method. Third Edition, 8vo. cloth, 10*s.*

DR. PARKIN.

THE CAUSATION AND PREVENTION OF DISEASE.

8vo. cloth, 5*s.*

MR. JAMES PART, F.R.C.S.

THE MEDICAL AND SURGICAL POCKET CASE BOOK,

for the Registration of important Cases in Private Practice, and to assist the Student of Hospital Practice. Second Edition. 3*s.* 6*d.*

DR. THOMAS B. PEACOCK, M.D.

ON THE INFLUENZA, OR EPIDEMIC CATARRHAL FEVER OF 1847-8.

8vo. cloth, 5*s.* 6*d.*

MR. OLIVER PEMBERTON, M.R.C.S.

OBSERVATIONS ON THE HISTORY, PATHOLOGY, AND TREATMENT OF CANCEROUS DISEASES. Part I.—MELANOSIS. With coloured Plates. Royal 8vo. cloth, 4*s.* 6*d.*

DR. PEREIRA, F.R.S.

SELECTA E PRÆSCRIPTIS: with a Key, containing the Prescriptions in an Unabbreviated Form, and a Literal Translation. Twelfth Edition. 24mo. cloth, 5*s.*

MR. PETTIGREW, F.R.S.

ON SUPERSTITIONS connected with the History and Practice of Medicine and Surgery. 8vo. cloth, 7*s.*

DR. PICKFORD.

HYGIENE; or, Health as Depending upon the Conditions of the Atmosphere, Food and Drinks, Motion and Rest, Sleep and Wakefulness, Secretions, Excretions, and Retentions, Mental Emotions, Clothing, Bathing, &c. Vol. I. 8vo. cloth, 9*s.*

MR. PIRRIE, F.R.S.E.

THE PRINCIPLES AND PRACTICE OF SURGERY. With numerous Engravings on Wood. 8vo. cloth, 21*s.*

PHARMACOPŒIA COLLEGII REGALIS MEDICORUM LONDINENSIS. 8vo. cloth, 9*s.*; or 24mo. 5*s.*

IMPRIMATUR.

Hic liber, cui titulus, PHARMACOPŒIA COLLEGII REGALIS MEDICORUM LONDINENSIS. Datum ex Ædibus Collegii in comitiis censoriis, Novembris Mensis 14to 1850.

JOHANNES AYRTON PARIS. *Præses.*

PROFESSORS PLATTNER & MUSPRATT.

THE USE OF THE BLOWPIPE IN THE EXAMINATION OF MINERALS, ORES, AND OTHER METALLIC COMBINATIONS. Illustrated by numerous Engravings on Wood. Third Edition. 8vo. cloth, 10*s.* 6*d.*

THE PRESCRIBER'S PHARMACOPŒIA; containing all the Medicines in the London Pharmacopœia, arranged in Classes according to their Action, with their Composition and Doses. By a Practising Physician. Fourth Edition. 32mo. cloth, 2*s.* 6*d.*; roan tuck (for the pocket), 3*s.* 6*d.*

DR. JOHN ROWLISON PRETTY.

AIDS DURING LABOUR, including the Administration of Chloroform, the Management of Placenta and Post-partum Hæmorrhage. Fcap. 8vo. cloth, 4*s.* 6*d.*

MR. LAKE PRICE.

PHOTOGRAPHIC MANIPULATION: Treating of the Practice of the Art, and its various appliances to Nature. With Fifty Engravings on Wood. Post 8vo. cloth, 6*s.* 6*d.*

DR. PRIESTLEY.

LECTURES ON THE DEVELOPMENT OF THE GRAVID UTERUS. 8vo. cloth, 5*s.* 6*d.*

SIR WM. PYM, K.C.H.

OBSERVATIONS UPON YELLOW FEVER, with a Review of "A Report upon the Diseases of the African Coast, by Sir WM. BURNETT and Dr. BRYSON," proving its highly Contagious Powers. Post 8vo. 6*s.*

DR. RADCLIFFE.

EPILEPSY, AND OTHER CONVULSIVE AFFECTIONS; their Pathology and Treatment. Second Edition. Post 8vo. cloth, 7*s.* 6*d.*

MR. RAINEY.

ON THE MODE OF FORMATION OF SHELLS OF ANIMALS, OF BONE, AND OF SEVERAL OTHER STRUCTURES, by a Process of Molecular Coalescence, Demonstrable in certain Artificially-formed Products. Fcap. 8vo. cloth, 4*s.* 6*d.*

DR. F. H. RAMSBOTHAM.

THE PRINCIPLES AND PRACTICE OF OBSTETRIC MEDICINE AND SURGERY. Illustrated with One Hundred and Twenty Plates on Steel and Wood; forming one thick handsome volume. Fourth Edition. 8vo. cloth, 22*s.*

DR. RAMSBOTHAM.

PRACTICAL OBSERVATIONS ON MIDWIFERY, with a Selection of Cases. Second Edition. 8vo. cloth, 12*s.*

DR. DU BOIS REYMOND.

ANIMAL ELECTRICITY; Edited by H. BENCE JONES, M.D., F.R.S. With Fifty Engravings on Wood. Foolscap 8vo. cloth, 6*s.*

DR. REYNOLDS.

THE DIAGNOSIS OF DISEASES OF THE BRAIN, SPINAL CORD, AND THEIR APPENDAGES. 8vo. cloth, 8*s.*

DR. B. W. RICHARDSON.

I.

ON THE CAUSE OF THE COAGULATION OF THE BLOOD. Being the ASTLEY COOPER PRIZE ESSAY for 1856. With a Practical Appendix. 8vo. cloth, 16*s.*

II.

THE HYGIENIC TREATMENT OF PULMONARY CONSUMPTION. 8vo. cloth, 5*s.* 6*d.*

MR. ROBERTON.

ON THE PHYSIOLOGY AND DISEASES OF WOMEN, AND ON PRACTICAL MIDWIFERY. 8vo. cloth, 12*s.*

MR. WILLIAM ROBERTS.

AN ESSAY ON WASTING PALSY; being a Systematic Treatise on the Disease hitherto described as ATROPHIE MUSCULAIRE PROGRESSIVE. With Four Plates. 8vo. cloth, 7*s.* 6*d.*

DR. W. H. ROBERTSON.

I.

THE NATURE AND TREATMENT OF GOUT.
8vo. cloth, 10*s.* 6*d.*

II.

A TREATISE ON DIET AND REGIMEN.
Fourth Edition. 2 vols. post 8vo. cloth, 12*s.*

DR. ROWE, F.S.A.

I.

ON SOME OF THE MORE IMPORTANT DISEASES OF WOMEN and CHILDREN. Second Edition. Fcap. 8vo. cloth, 4*s.* 6*d.*

II.

NERVOUS DISEASES, LIVER AND STOMACH COMPLAINTS, LOW SPIRITS, INDIGESTION, GOUT, ASTHMA, AND DISORDERS PRODUCED BY TROPICAL CLIMATES. With Cases. Sixteenth Edition. Fcap. 8vo. 2*s.* 6*d.*

DR. ROYLE, F.R.S.

A MANUAL OF MATERIA MEDICA AND THERAPEUTICS. With numerous Engravings on Wood. Third Edition. Fcap. 8vo. cloth, 12*s.* 6*d.*

MR. RUMSEY, F.R.C.S.

ESSAYS ON STATE MEDICINE. 8vo. cloth, 10*s.* 6*d.*

DR. SALTER, F.R.S.

ON ASTHMA: its Pathology, Causes, Consequences, and Treatment. 8vo. cloth, 10*s.*

MR. SAVORY.

A COMPENDIUM OF DOMESTIC MEDICINE, AND COMPANION TO THE MEDICINE CHEST; comprising Plain Directions for the Employment of Medicines, with their Properties and Doses, and Brief Descriptions of the Symptoms and Treatment of Diseases, and of the Disorders incidental to Infants and Children, with a Selection of the most efficacious Prescriptions. Intended as a Source of Easy Reference for Clergymen, and for Families residing at a Distance from Professional Assistance. Fifth Edition. 12mo. cloth, 5*s.*

DR. SCHACHT.

THE MICROSCOPE, AND ITS APPLICATION TO VEGETABLE ANATOMY AND PHYSIOLOGY. Edited by FREDERICK CURREY, M.A. Fcap. 8vo. cloth, 6*s.*

DR. SEMPLE.

ON COUGH: its Causes, Varieties, and Treatment. With some practical Remarks on the Use of the Stethoscope as an aid to Diagnosis. Post 8vo. cloth, 4*s.* 6*d.*

MR. SHAW, M.R.C.S.

THE MEDICAL REMEMBRANCER; OR, BOOK OF EMERGENCIES: in which are concisely pointed out the Immediate Remedies to be adopted in the First Moments of Danger from Poisoning, Apoplexy, Burns, and other Accidents; with the Tests for the Principal Poisons, and other useful Information. Fourth Edition. Edited, with Additions, by Jonathan Hutchinson, M.R.C.S. 32mo. cloth, 2*s*. 6*d*.

DR. SIBSON, F.R.S.

MEDICAL ANATOMY. With coloured Plates. Imperial folio. Fasciculi I. to VI. 5*s*. each.

DR. E. H. SIEVEKING.

ON EPILEPSY AND EPILEPTIFORM SEIZURES: their Causes, Pathology, and Treatment. Post 8vo. cloth, 7*s*. 6*d*.

MR. SINCLAIR AND DR. JOHNSTON.

PRACTICAL MIDWIFERY: Comprising an Account of 13,748 Deliveries, which occurred in the Dublin Lying-in Hospital, during a period of Seven Years. 8vo. cloth, 15*s*.

MR. ALFRED SMEE, F.R.S.

GENERAL DEBILITY AND DEFECTIVE NUTRITION; their Causes, Consequences, and Treatment. Fcap. 8vo. cloth, 3*s*. 6*d*.

DR. SMELLIE.

OBSTETRIC PLATES: being a Selection from the more Important and Practical Illustrations contained in the Original Work. With Anatomical and Practical Directions. 8vo. cloth, 5*s*.

MR. HENRY SMITH, F.R.C.S.

I.

ON STRICTURE OF THE URETHRA. 8vo. cloth, 7*s*. 6*d*.

II.

HÆMORRHOIDS AND PROLAPSUS OF THE RECTUM: Their Treatment by the Application of Nitric Acid. Second Edition. Fcap. 8vo. cloth, 3*s*.

DR. W. TYLER SMITH.

I.

A MANUAL OF OBSTETRICS, THEORETICAL AND PRACTICAL. Illustrated with 186 Engravings. Fcap. 8vo. cloth, 12*s*. 6*d*.

II.

THE PATHOLOGY AND TREATMENT OF LEUCORRHŒA. With Engravings on Wood. 8vo. cloth, 7*s*.

DR. SNOW.

ON CHLOROFORM AND OTHER ANÆSTHETICS: THEIR ACTION AND ADMINISTRATION. Edited, with a Memoir of the Author, by Benjamin W. Richardson, M.D. 8vo. cloth, 10*s*. 6*d*.

DR. STANHOPE TEMPLEMAN SPEER.

PATHOLOGICAL CHEMISTRY, IN ITS APPLICATION TO THE PRACTICE OF MEDICINE. Translated from the French of MM. Becquerel and Rodier. 8vo. cloth, 12*s.*

DR. SPURGIN.

LECTURES ON MATERIA MEDICA, AND ITS RELATIONS TO THE ANIMAL ECONOMY. Delivered before the Royal College of Physicians. 8vo. cloth, 5*s.* 6*d.*

DR. STEGGALL.

STUDENTS' BOOKS FOR EXAMINATION.

I.

A MEDICAL MANUAL FOR APOTHECARIES' HALL AND OTHER MEDICAL BOARDS. Twelfth Edition. 12mo. cloth, 10*s.*

II.

A MANUAL FOR THE COLLEGE OF SURGEONS; intended for the Use of Candidates for Examination and Practitioners. Second Edition. 12mo. cloth, 10*s.*

III.

GREGORY'S CONSPECTUS MEDICINÆ THEORETICÆ. The First Part, containing the Original Text, with an Ordo Verborum, and Literal Translation. 12mo. cloth, 10*s.*

IV.

THE FIRST FOUR BOOKS OF CELSUS; containing the Text, Ordo Verborum, and Translation. Second Edition. 12mo. cloth, 8*s.*

V.

A TEXT-BOOK OF MATERIA-MEDICA AND THERAPEUTICS. 12mo. cloth, 7*s.*

VI.

FIRST LINES FOR CHEMISTS AND DRUGGISTS PREPARING FOR EXAMINATION AT THE PHARMACEUTICAL SOCIETY. Second Edition. 18mo. cloth, 3*s.* 6*d.*

MR. STOWE, M.R.C.S.

A TOXICOLOGICAL CHART, exhibiting at one view the Symptoms, Treatment, and Mode of Detecting the various Poisons, Mineral, Vegetable, and Animal. To which are added, concise Directions for the Treatment of Suspended Animation. Eleventh Edition. On Sheet, 2*s.*; mounted on Roller, 5*s.*

DR. SWAYNE.

OBSTETRIC APHORISMS FOR THE USE OF STUDENTS COMMENCING MIDWIFERY PRACTICE. With Engravings on Wood. Fcap. 8vo. cloth, 3*s.* 6*d.*

MR. TAMPLIN, F.R.C.S.E.

LATERAL CURVATURE OF THE SPINE: its Causes, Nature, and Treatment. 8vo. cloth, 4*s.*

DR. ALFRED S. TAYLOR, F.R.S.

I.

A MANUAL OF MEDICAL JURISPRUDENCE. Sixth Edition. Fcap. 8vo. cloth, 12*s*. 6*d*.

II.

ON POISONS, in relation to MEDICAL JURISPRUDENCE AND MEDICINE. Second Edition. Fcap. 8vo. cloth, 12*s*. 6*d*.

MR. TEALE.

ON AMPUTATION BY A LONG AND A SHORT RECTANGULAR FLAP. With Engravings on Wood. 8vo. cloth, 5*s*.

DR. THEOPHILUS THOMPSON, F.R.S.

I.

CLINICAL LECTURES ON PULMONARY CONSUMPTION. With Plates. 8vo. cloth, 7*s*. 6*d*.

II.

LETTSOMIAN LECTURES ON PULMONARY CONSUMPTION; with Remarks on Microscopical Indications, and on Cocoa-nut Oil. Post 8vo., 2*s*. 6*d*.

DR. THOMAS.

THE MODERN PRACTICE OF PHYSIC; exhibiting the Symptoms, Causes, Morbid Appearances, and Treatment of the Diseases of all Climates. Eleventh Edition. Revised by ALGERNON FRAMPTON, M.D. 2 vols. 8vo. cloth, 28*s*.

MR. HENRY THOMPSON, M.B. LOND., F.R.C.S.

I.

STRICTURE OF THE URETHRA; its Pathology and Treatment. The last Jacksonian Treatise of the Royal College of Surgeons. With Plates. Second Edition. 8vo. cloth, 10*s*.

II.

THE ENLARGED PROSTATE; its Pathology and Treatment. With Observations on the Relation of this Complaint to Stone in the Bladder. With Plates. 8vo. cloth, 7*s*. 6*d*.

DR. TILT.

I.

ON DISEASES OF WOMEN AND OVARIAN INFLAMMATION IN RELATION TO MORBID MENSTRUATION, STERILITY, PELVIC TUMOURS, AND AFFECTIONS OF THE WOMB. Second Edition. 8vo. cloth, 9*s*.

II.

THE CHANGE OF LIFE IN HEALTH AND DISEASE: a Practical Treatise on the Nervous and other Affections incidental to Women at the Decline of Life. Second Edition. 8vo. cloth, 6*s*.

DR. THUDICHUM.

A TREATISE ON THE PATHOLOGY OF THE URINE,

Including a complete Guide to its Analysis. With Plates, 8vo. cloth, 14*s*.

DR. GODWIN TIMMS.

CONSUMPTION: its True Nature and Successful Treatment. Crown 8vo. cloth, 10*s*.

DR. ROBERT B. TODD, F.R.S.

CLINICAL LECTURES ON THE PRACTICE OF MEDICINE:—

VOL. I.—PARALYSIS, DISEASES OF THE BRAIN, and other AFFECTIONS of the NERVOUS SYSTEM. Second Edition. Foolscap 8vo. cloth, 6*s*.

VOL. II.—CERTAIN DISEASES OF THE URINARY ORGANS, AND ON DROPSIES. Fcap. 8vo. cloth, 6*s*.

VOL. III.—ON CERTAIN ACUTE DISEASES. Foolscap 8vo. cloth, 6*s*.

MR. TOMES, F.R.S.

A MANUAL OF DENTAL SURGERY. With 208 Engravings on Wood. Fcap. 8vo. cloth, 12*s*. 6*d*.

MR. JOSEPH TOYNBEE, F.R.S., F.R.C.S.

THE DISEASES OF THE EAR: THEIR NATURE, DIAGNOSIS, AND TREATMENT. Illustrated with numerous Engravings on Wood. 8vo. cloth, 15*s*.

DR. TURNBULL.

I.

AN INQUIRY INTO THE CURABILITY OF CONSUMPTION,

ITS PREVENTION, AND THE PROGRESS OF IMPROVEMENT IN THE TREATMENT. Third Edition. 8vo. cloth, 6*s*.

II.

A PRACTICAL TREATISE ON DISORDERS OF THE STOMACH

with FERMENTATION; and on the Causes and Treatment of Indigestion, &c. 8vo. cloth, 6*s*.

VESTIGES OF THE NATURAL HISTORY OF CREATION.

Tenth Edition. Illustrated with 100 Engravings on Wood. 8vo. cloth, 12*s*. 6*d*.

BY THE SAME AUTHOR.

EXPLANATIONS: A SEQUEL TO "VESTIGES."

Second Edition. Post 8vo. cloth, 5*s*.

DR. UNDERWOOD.

TREATISE ON THE DISEASES OF CHILDREN. Tenth Edition, with Additions and Corrections by HENRY DAVIES, M.D. 8vo. cloth, 15*s*.

DR. UNGER.

BOTANICAL LETTERS. Translated by Dr. B. PAUL. Numerous Woodcuts. Post 8vo., 5*s.*

MR. WADE, F.R.C.S.

STRICTURE OF THE URETHRA, ITS COMPLICATIONS AND EFFECTS; a Practical Treatise on the Nature and Treatment of those Affections. Fourth Edition. 8vo. cloth, 7*s.* 6*d.*

DR. WALLER.

ELEMENTS OF PRACTICAL MIDWIFERY; or, Companion to the Lying-in Room. Fourth Edition, with Plates. Fcap. cloth, 4*s.* 6*d.*

MR. HAYNES WALTON, F.R.C.S.

OPERATIVE OPHTHALMIC SURGERY. With Engravings on Wood. 8vo. cloth, 18*s.*

DR. WATERS, M.R.C.P.

THE ANATOMY OF THE HUMAN LUNG. The Prize Essay to which the Fothergillian Gold Medal was awarded by the Medical Society of London. Post 8vo. cloth, 6*s.* 6*d.*

DR. EBEN. WATSON, A.M.

ON THE TOPICAL MEDICATION OF THE LARYNX IN CERTAIN DISEASES OF THE RESPIRATORY AND VOCAL ORGANS. 8vo. cloth, 5*s.*

DR. WEBER.

A CLINICAL HAND-BOOK OF AUSCULTATION AND PERCUSSION. Translated by JOHN COCKLE, M.D. 5*s.*

DR. WEGG.

OBSERVATIONS RELATING TO THE SCIENCE AND ART OF MEDICINE. 8vo. cloth, 8*s.*

MR. T. SPENCER WELLS, F.R.C.S.

PRACTICAL OBSERVATIONS ON GOUT AND ITS COMPLICATIONS, and on the Treatment of Joints Stiffened by Gouty Deposits. Foolscap 8vo. cloth, 5*s.*

DR. WEST.

LECTURES ON THE DISEASES OF WOMEN. Second Edition. 8vo. cloth, 16*s.*

MR. WHEELER.

HAND-BOOK OF ANATOMY FOR STUDENTS OF THE FINE ARTS. New Edition, with Engravings on Wood. Fcap. 8vo., 2*s*. 6*d*.

DR. WHITEHEAD, F.R.C.S.

ON THE TRANSMISSION FROM PARENT TO OFFSPRING OF SOME FORMS OF DISEASE, AND OF MORBID TAINTS AND TENDENCIES. Second Edition. 8vo. cloth, 10*s*. 6*d*.

DR. WILLIAMS, F.R.S.

PRINCIPLES OF MEDICINE: An Elementary View of the Causes, Nature, Treatment, Diagnosis, and Prognosis, of Disease. With brief Remarks on Hygienics, or the Preservation of Health. The Third Edition. 8vo. cloth, 15*s*.

THE WIFE'S DOMAIN: the YOUNG COUPLE—the MOTHER—the NURSE—the NURSLING. Post 8vo. cloth, 3*s*. 6*d*.

DR. JOSEPH WILLIAMS.

INSANITY: its Causes, Prevention, and Cure; including Apoplexy, Epilepsy, and Congestion of the Brain. Second Edition. Post 8vo. cloth, 10*s*. 6*d*.

DR. J. HUME WILLIAMS.

UNSOUNDNESS OF MIND, IN ITS MEDICAL AND LEGAL CONSIDERATIONS. 8vo. cloth, 7*s*. 6*d*.

DR. WILLIAMSON, STAFF-SURGEON.

NOTES ON THE WOUNDED FROM THE MUTINY IN INDIA: with a Description of the Preparations of Gunshot Injuries contained in the Museum at Fort Pitt. With Lithographic Plates. 8vo. cloth, 12*s*.

MR. ERASMUS WILSON, F.R.S.

I.

THE ANATOMIST'S VADE-MECUM: A SYSTEM OF HUMAN ANATOMY. With numerous Illustrations on Wood. Seventh Edition. Foolscap 8vo. cloth, 12*s*. 6*d*.

II.

DISEASES OF THE SKIN: A Practical and Theoretical Treatise on the DIAGNOSIS, PATHOLOGY, and TREATMENT OF CUTANEOUS DISEASES. Fourth Edition. 8vo. cloth, 16*s*.

THE SAME WORK; illustrated with finely executed Engravings on Steel, accurately coloured. 8vo. cloth, 34*s*.

MR. ERASMUS WILSON, F.R.S. (*continued*).

III.

HEALTHY SKIN: A Treatise on the Management of the Skin and Hair in relation to Health. Sixth Edition. Foolscap 8vo. 2*s*. 6*d*.

IV.

PORTRAITS OF DISEASES OF THE SKIN. Folio. Fasciculi I. to XII., completing the Work. 20*s*. each.

V.

ON SYPHILIS, CONSTITUTIONAL AND HEREDITARY; AND ON SYPHILITIC ERUPTIONS. With Four Coloured Plates. 8vo. cloth, 16*s*.

VI.

A THREE WEEKS' SCAMPER THROUGH THE SPAS OF GERMANY AND BELGIUM, with an Appendix on the Nature and Uses of Mineral Waters. Post 8vo. cloth, 6*s*. 6*d*.

* * *

DR. FORBES WINSLOW, D.C.L. OXON.

I.

ON OBSCURE DISEASES OF THE BRAIN AND MIND: their Incipient Symptoms, Pathology, Diagnosis, Treatment, and Prophylaxis. 8vo. cloth, 16*s*.

II.

LETTSOMIAN LECTURES ON INSANITY. 8vo. cloth, 5*s*.

* * *

DR. G. C. WITTSTEIN.

PRACTICAL PHARMACEUTICAL CHEMISTRY: An Explanation of Chemical and Pharmaceutical Processes, with the Methods of Testing the Purity of the Preparations, deduced from Original Experiments. Translated from the Second German Edition, by STEPHEN DARBY. 18mo. cloth, 6*s*.

* * *

DR. HENRY G. WRIGHT.

HEADACHES; their Causes and their Cure. Third Edition. Fcap. 8vo. 2*s*. 6*d*.

* * *

MR. YEARSLEY.

I.

DEAFNESS PRACTICALLY ILLUSTRATED; being an Exposition of Original Views as to the Causes and Treatment of Diseases of the Ear. Fifth Edition. Foolscap 8vo., 2*s*. 6*d*.

II.

ON THE ENLARGED TONSIL AND ELONGATED UVULA, and other Morbid Conditions of the Throat. Seventh Edition. 8vo. cloth, 5*s*.

CHURCHILL'S SERIES OF MANUALS.

Fcap. 8vo. cloth, 12*s.* 6*d.* each.

"We here give Mr. Churchill public thanks for the positive benefit conferred on the Medical Profession, by the series of beautiful and cheap Manuals which bear his imprint."—*British and Foreign Medical Review.*

AGGREGATE SALE, 116,000 COPIES.

The ANATOMIST'S VADE-MECUM. A System of Human Anatomy. With numerous Illustrations on Wood. Seventh Edition. By Erasmus Wilson, F.R.C.S., F.R.S.

CHEMISTRY. With numerous Illustrations on Wood. Seventh Edition. By George Fownes, F.R.S. Edited by H. Bence Jones, M.D., F.R.C.P., and A. W. Hofmann, F.R.S.

DENTAL SURGERY. With 208 Illustrations on Wood. By John Tomes, F.R.S.

MATERIA MEDICA. With numerous Illustrations on Wood. Third Edition. By J. Forbes Royle, M.D., F.R.S., and Frederick W. Headland, M.D., F.L.S.

MEDICAL JURISPRUDENCE. Sixth Edition. By Alfred Swaine Taylor, M.D., F.R.S.

PRACTICE OF MEDICINE. By G. Hilaro Barlow, M.D., M.A.

The MICROSCOPE and its REVELATIONS. With numerous Illustrations on Wood. Second Edition. By W. B. Carpenter, M.D., F.R.S.

NATURAL PHILOSOPHY. With numerous Illustrations on Wood. Fifth Edition. By Golding Bird, M.D., M.A., F.R.S., and Charles Brooke, M.B., M.A., F.R.S.

OBSTETRICS. With 186 Engravings on Wood. By W. Tyler Smith, M.D., L.R.C.P.

OPHTHALMIC MEDICINE and SURGERY. With coloured Engravings on Steel, and numerous Illustrations on Wood. Second Edition. By T. Wharton Jones, F.R.C.S., F.R.S.

PATHOLOGICAL ANATOMY. With numerous Illustrations on Wood. By C. Handfield Jones, M.B., F.R.C.P., and E. H. Sieveking, M.D., F.R.C.P.

PHYSIOLOGY. With numerous Illustrations on Steel and Wood. Third Edition. By William B. Carpenter, M.D., F.R.S.

POISONS. Second Edition. By Alfred Swaine Taylor, M.D., F.R.S.

PRACTICAL SURGERY. With numerous Illustrations on Wood. Fourth Edition. By William Fergusson, F.R.C.S.

Printed by W. Blanchard & Sons, 62, Millbank Street, Westminster.

48

LANE MEDICAL LIBRARY

To avoid fine, this book should be returned on or before the date last stamped below.

OCT 4 - 1986

N32H Parker,L. 15545
P24 The modern treatment
1860 of syphilitic diseases.
4th ed.

DATE DUE

ATTIC